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Department of Energy

Ohio Field Office
Fernald Area Office
P. O. Box 538705
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DEC 23 1997

DOE-0276-98

Mr. Gene Jablonowski, Remedial Program Manager
U.S. Environmental Protection Agency
Region V 5HRE-BJ
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

Mr. Tom Schneider, Project Manager
Ohio Environmental Protection Agency
401 East 5th Street
Dayton, Ohio 45402-2911

Dear Mr. Jablonowski and Mr. Schneider:

PLANT 1 COMPLEX - PHASE I PROJECT COMPLETION REPORT, REVISION 1

References: 1) Letter, Saric to Reising, "Plant 1 Complex Completion Report," dated October 2, 1997.

2) Letter, Schneider to Reising, "Ohio EPA Review of Plant One Complex, Phase One Project Completion Report," dated November 25, 1997.

This letter transmits the Department of Energy's (DOE) response and action for U.S. Environmental Protection Agency (U.S. EPA) comments provided in the above referenced letter dated October 2, 1997, to the U.S. EPA and Ohio Environmental Protection Agency (OEPA). The enclosure also contains pages of the report affected by the responses in reline/strikeout format and the revised report in final form.

Specifically, the comment responses contain the DOE response and action for each U.S. EPA comment, and each affected page of the report contains text changes shown in redline/strikeout form. The Project Completion Report in final form was prepared following review of the revisions shown in the comment package during the December 16, 1997, teleconference. Revision 1 of the Project Completion Report is enclosed. Please note that there is substantive change from the original version approved by the OEPA. Per discussions with OEPA, Certification of Closure of Hazardous Waste Management Unit 25, closed under the integrated process, is now included in the Project Completion Report.

If you or any of your staff have any questions, please contact John Trygier at (513) 648-3154.

Sincerely,

Johnny Reising

FEMP:Trygier

Johnny W. Reising
Fernald Remedial Action
Project Manager

Enclosures: As stated

cc w/encs:

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OPERABLE UNIT 3

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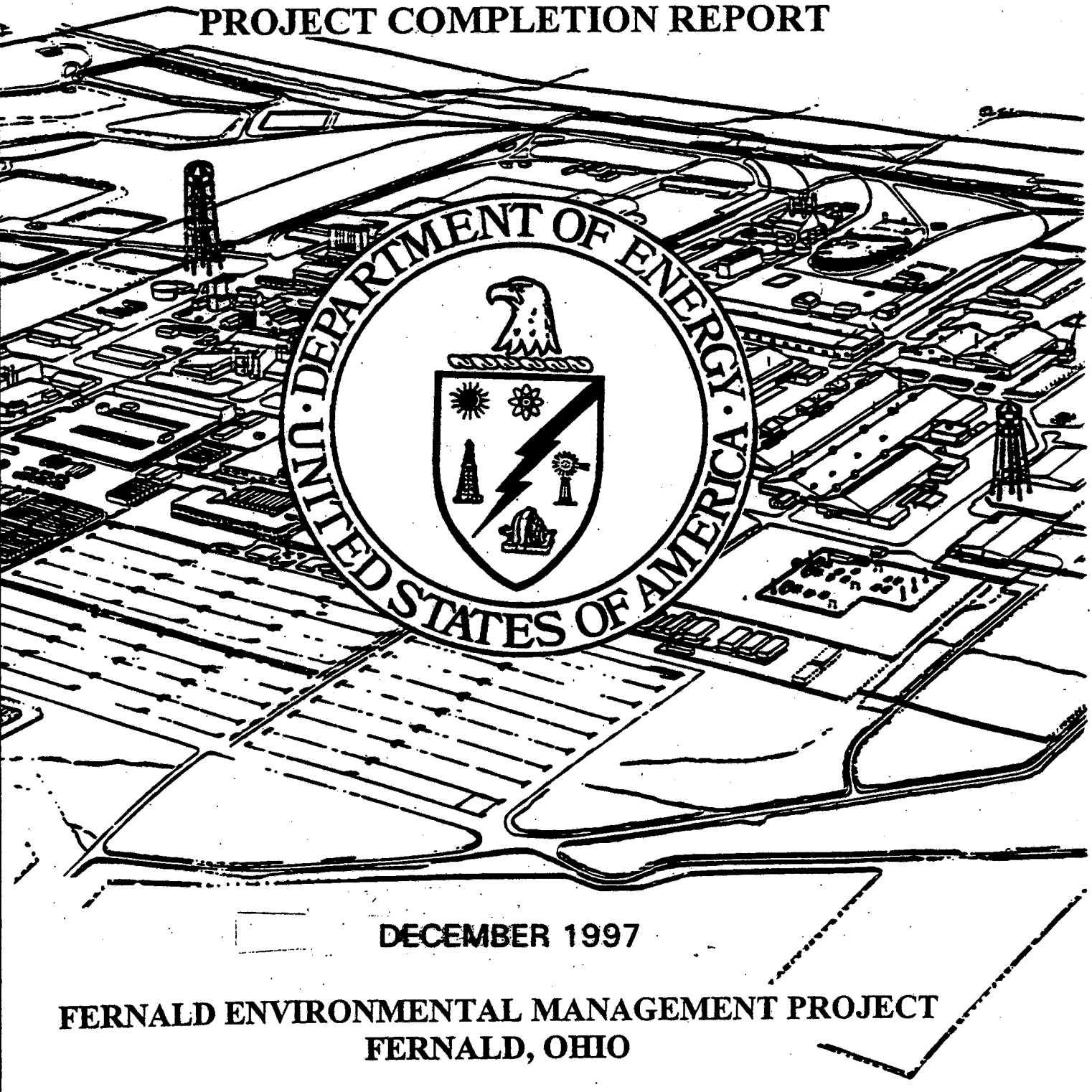
PLANT 1 COMPLEX - PHASE I
PROJECT COMPLETION REPORT



DECEMBER 1997

FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
FERNALD, OHIO

U.S. DEPARTMENT OF ENERGY
FERNALD AREA OFFICE

000003

FINAL

DOCUMENT CONTROL NO. 2503-RP-0017, REV. 1

FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

PLANT 1 COMPLEX - PHASE I
PROJECT COMPLETION REPORT

REVISION 1
DECEMBER 1997

U.S. DEPARTMENT OF ENERGY
FERNALD AREA FIELD OFFICE

FEMP DOCUMENT CONTROL NO. # 2503-RP-0017

CONTENTS

FIGURES

TABLES

ATTACHMENTS

ACRONYMS AND ABBREVIATIONS

ACM	asbestos-containing material
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CFR	Code of Federal Regulations
D&D	decontamination and dismantlement
DCN(s)	Design Change Notice
DOE	Department of Energy
FEMP	Fernald Environmental Management Project
HWMU	hazardous waste management unit
HEPA	high efficiency particulate air
ISO(s)	International Shipping Organization containers
LSTD	Large Scale Technology Demonstration
NPDES	National Pollutant Discharge Elimination System
NTS	Nevada Test Site
OAC	Ohio Administrative Code
Ohio EPA	Ohio Environmental Protection Agency
OSDF	On-Site Disposal Facility
OU3	Operable Unit 3
OU5	Operable Unit 5
pCi/m^3	picoCuries per cubic meter
RCRA	Resource Conservation and Recovery Act
RD/RA	Remedial Design/Remedial Action
ROB(s)	roll-off box
SAP	Sampling and Analysis Plan
SWMB(s)	small white metal box
SWIFTS	Sitewide Waste Information, Forecasting and Tracking System
TSS	Ore Silo Size-Reduction Tension Support Structure
UNH	uranyl nitrate hydrate
U.S. EPA	United States Environmental Protection Agency
WWTS	wastewater treatment system

1.0 INTRODUCTION

The purpose of this Project Completion Report is to document the completion and to close out the above-grade decontamination and dismantlement (D&D) of Plant 1 Complex - Phase I in accordance with the U.S. Environmental Protection Agency (U.S. EPA) and Ohio EPA approved Plant 1 Complex - Phase I Implementation Plan for Above-Grade D&D, March 1996. The Plant 1 Complex - Phase I D&D included the following Operable Unit 3 (OU3) components:

Building 1A - Preparation Plant;
Building 1B - Plant 1 Storage Shelter (partial);
Building 30B - Drum Storage Warehouse;
Building 56B - Storage Shed (West);
Building 56C - Storage Shed (East);
Building 66 - Drum Reconditioning;
Building 67 - Plant 1 Thorium Warehouse;
Building 72 - Drum Storage Building; and
Ore Silo Size-Reduction Tension Support Structure.

This Project Completion Report summarizes remediation work performed during the Plant 1 D&D project and includes a description of the work practice changes and project improvements with an explanation of why these changes were necessary (Attachment A - Design Change Notices). This report summarizes the work activities completed, the project air monitoring data (Attachment B - Supplemental Air Monitoring Sampling Results), the project wastewater data (Attachment C - Plant 1 D&D Water Sampling Plan and Decontamination Sampling Results), the current location of materials in interim storage and the planned disposition of the materials from this project (Attachment D - Sitewide Information, Forecasting and Tracking System Report). This D&D activity also included nine Large Scale Technology Demonstration (LSTD) Projects. The six LSTD Projects were described in Section 2.4 of this Report and the LSTD Project Report is provided as Attachment E. The LSTD Projects were conducted to quantify and document the benefits that can be achieved using fully developed, but unproven, D&D technologies in radiologically contaminated field conditions.

D&D field activities began in January 1996 and continued through June 1997. Remediation activities were completed ahead of schedule; the Completion of Field Activities milestone occurred on June 27, 1997, which is seven months ahead of the completion date presented in the Implementation Plan (Note: based on the OU3 Integrated Remedial Design/Remedial Action Work Plan, the title "Certification of Field Activities" replaced the term "Certification of Construction Completion" used in the Implementation Plan). There were no lost time accidents or injuries during the D&D activities because of proper training and use of safety equipment. The lessons learned incorporated from Plant 7 and Building 4A D&D activities facilitated project performance. All of the DCNs in Attachment A were developed as lessons learned and improved work procedures during the field activities for Plant 7 and Building 4A Complex D&D activities. Additional lessons learned are discussed in Section 4.0 of this Project Completion Report. Air emission controls and work practices maintained air emissions below Fernald Environmental Management Project (FEMP) project-specific action levels.

1.1 Complex Description

The Plant 1 Complex - Phase I was located between 2nd and 3rd Streets, in the northwest portion of the former production area, as shown (shaded) in Figure 1-1. The historical processes and operations within the Plant 1 Complex - Phase I included the preparation of uranium and thorium ore stock for on-site processing, reconditioning of used storage drums and waste storage. These primary and secondary operations used both radioactive and chemical constituents. During operations, material handling procedures resulted in chemical and radiological contamination to Buildings 1A, 66, 67 and 72. The Ore Silo Size-Reduction Tension Support Structure, and Buildings 1B, 30B, 56B, and 56C were not chemically or radiologically contaminated structures.

Building 1A - Preparation Plant
Building 1A was a four-story, irregularly shaped building located north of 2nd Street and east of A Street. Building 1A was approximately 82 feet x 202 feet x 60 feet, consisting of a steel frame, interior and exterior transite walls (with batt insulation in between), a transite roof and poured reinforced concrete foundation and shielding walls with concrete block walls.

Enriched uranium materials that were to be processed at the FEMP were received at Building 1A. Ore concentrates and recycled materials were weighed, sampled, and milled in Building 1A for distribution to other processes. Higher enrichment uranyl nitrate hexahydrate (UNH) solution was prepared in Building 1A for use in the Ore Refinery Plant (Building 2A) as isotonic sweetener. Other supporting operations that were performed in the plant included drum sampling and washing, solvent recovery, repackaging, and wastewater treatment.

Building 1A had seven processing areas: drum sampling, crushing/milling, enriched materials reclamation, drum washing, solvent reclamation, wastewater handling and repackaging.

Building 1B - Plant 1 Storage Shelter
Building 1B is a structural steel shelter with a metal panel roof that covers a portion of the Plant 1 Storage Pad. Building 1B is located immediately north of the former Building 1A. The roof is 18 feet above the ground and originally provided 12,768 square feet of covered storage area for drums. Approximately one-eighth of Building 1B was dismantled during Plant 1 Complex - Phase I to allow for safe clearance of heavy equipment and hoists during Building 1A D&D activities. The remaining seven-eighths of Building 1B will continue to provide shelter for Plant 1 Storage Pad activities and will be included in the Plant 1 Complex - Phase II D&D activities.

Building 30B - Drum Storage Warehouse
Building 30B was a single-level structure located south-southeast of Plant 1A as shown in Figure 1-1. Building 30B was a rectangular building consisting of metal walls on a poured reinforced concrete foundation with a metal roof and steel frame. The overall dimensions of the building were approximately 20 feet x 33 feet x 12 feet Building 30B had an approximately 50 square feet^2 transite awning and was used as a truck dock and scale house. The building was also used for sampling and as a 90-day staging area for drummed Resource Conservation and Recovery Act (RCRA)-regulated hazardous waste.

Building 56B - Storage Shed (West)
Building 56B was a single-level, rectangular structure consisting of a wooden frame with metal walls, metal roof, and dirt and gravel floor, with overall dimensions of approximately 24 feet x 63 feet x 14 feet Building 56B was used to store tools and miscellaneous equipment for on-site construction activities and was located north of the Plant 1 Storage Pad.

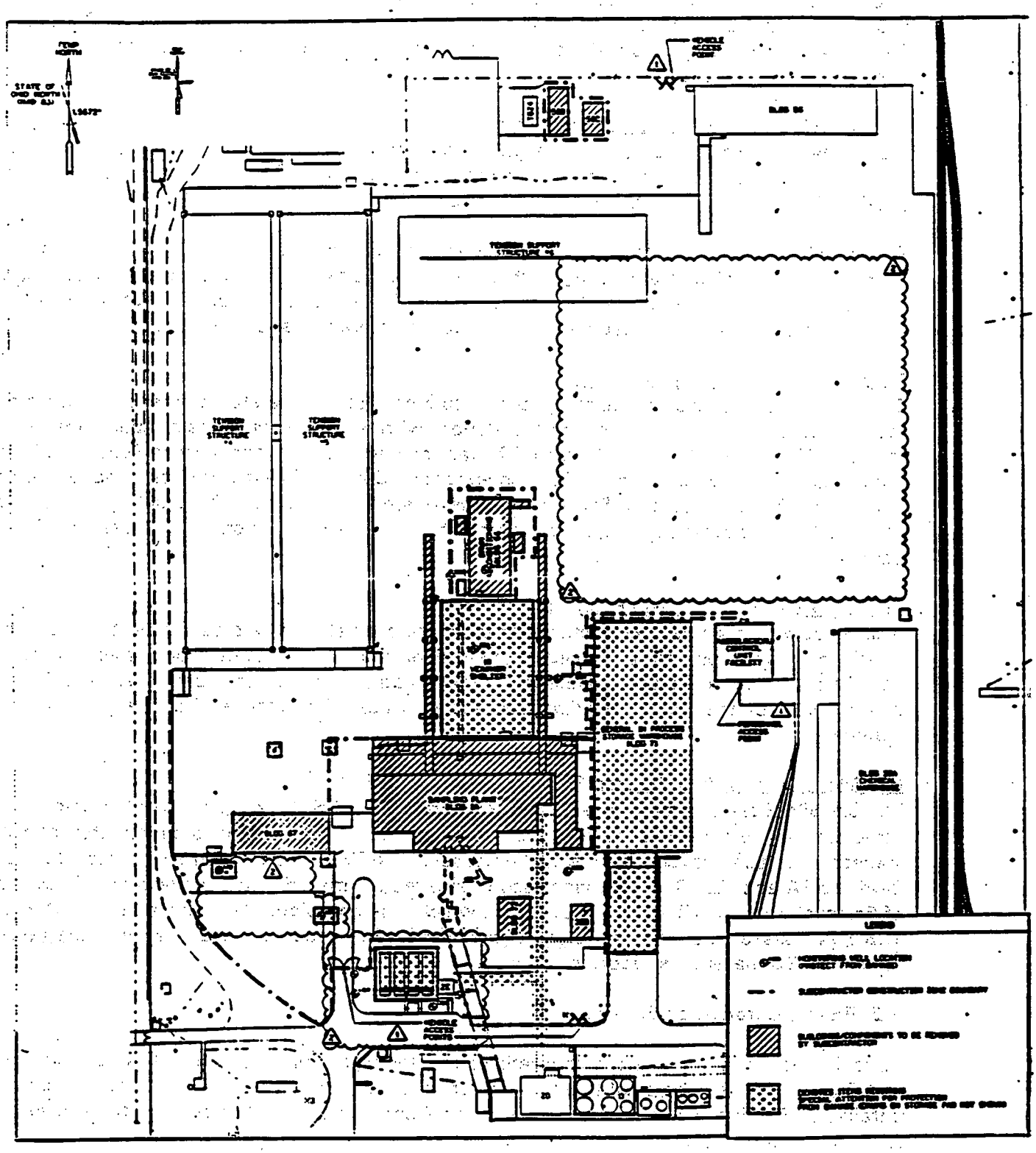


FIGURE 1-1 Plant 1 Complex - Phase I Building Locations

Building 56C - Storage Shed (East)
Building 56C was a single-level structure located north of Plant 1 Storage Pad. Building 56C, a rectangular structure, consisted of a wooden frame, metal and wood sheeting on the sides and roof, and dirt and gravel floor. The building's approximate dimensions were 30 feet x 50 feet x 14 feet Building 56C was used to store tools and miscellaneous equipment for on-site construction activities.

Building 66 - Drum Reconditioning Building
Building 66 was a single-level structure, with a dimensional steel frame, metal walls and a roof on a poured, reinforced concrete foundation, approximately 38 feet x 100 feet x 13 feet Building 66 was located directly north of Building 1B.

Building 66 was designed to perform four drum reconditioning processes: 1) remove old paint from 30- and 55-gallon drums using a Wheelabrator Shotblaster (the dust collector was located immediately east of Building 66); 2) repaint drums; 3) crush and bale drums that were deemed not reusable; and 4) store materials such as paints, solvents, and scrap paint.

Building 67 - Thorium Warehouse
Building 67 was a single-level rectangular structure consisting of a steel frame, metal walls and roof on a poured, reinforced concrete foundation, with overall dimensions of approximately 40 feet x 100 feet x 22 feet Building 67 was located west of the former Building 1A and northwest of the A Street and 2nd Street intersection. Building 67 was used as a thorium waste storage building and later as a RCRA hazardous waste storage area. The Building 67 slab was identified as a hazardous waste management unit (HWMU) which is addressed further in Section 2.1.3.

Building 72 - Drum Storage Building
Building 72 was a single-level rectangular structure consisting of a steel frame, transite walls, transite panel roof, poured reinforced concrete floor, with overall dimensions of approximately 31 feet x 41 feet x 11 feet Building 72 was located south of the former Building 1A and directly west of the former Building 308 and was used for storage of low-level radioactive material.

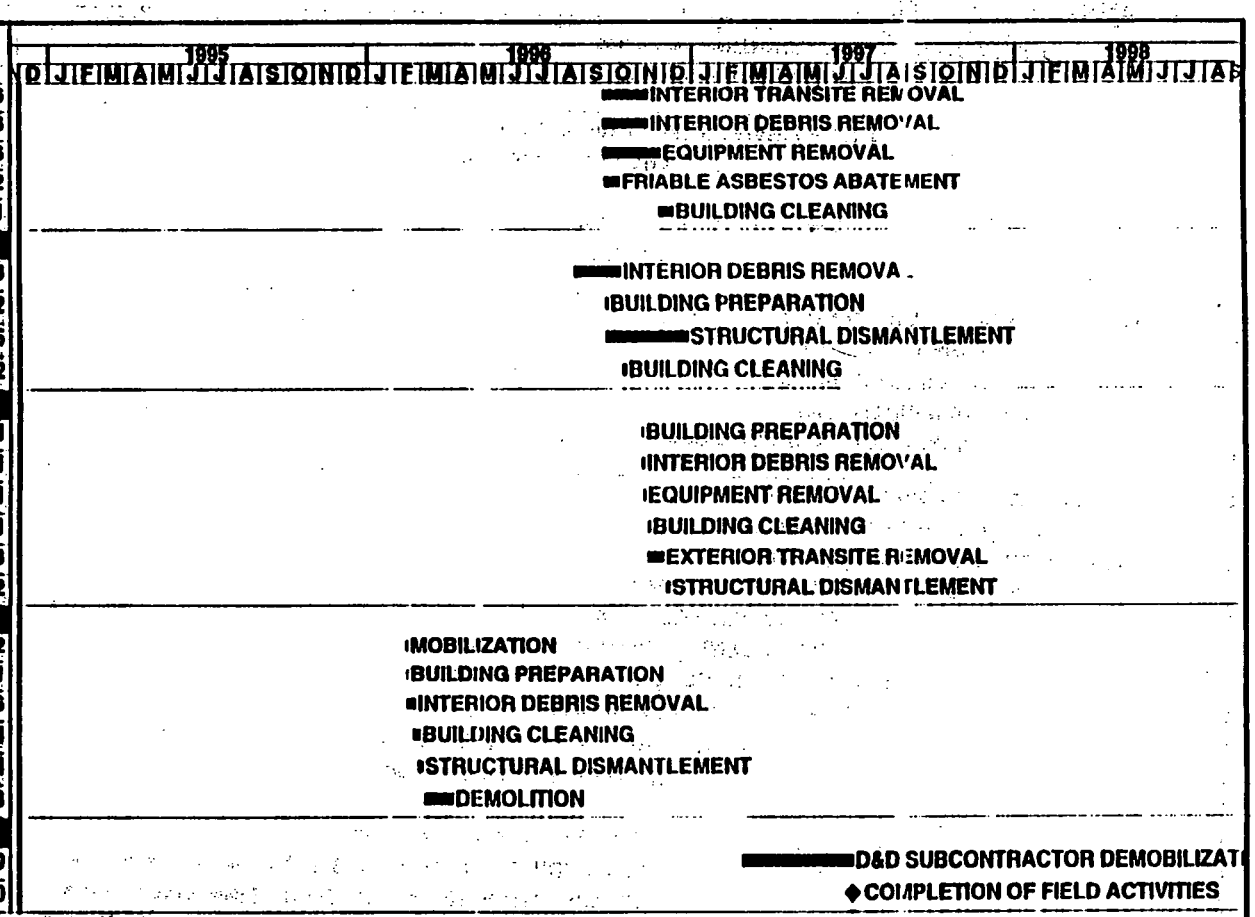
Ore Silo Size-reduction Tension Support Structure
The Ore Silo Size-reduction Tension Support Structure (TSS) was a prefabricated, relocatable structure with dimensions 50 feet x 30 feet x 18 feet The TSS was constructed of PVC-impregnated, fabric-covered tubular metal tresses. The TSS was erected and located between Buildings 1A and 72. The TSS was used to size-reduce materials and components in support of Removal Action No.13, Plant 1 Ore Silos, which was completed November 1994. After the TSS was disassembled, the structure components were placed into storage for future re-use. Thus, no TSS material is reported as waste.

1.2 Project Chronology Summary

Table 1-1 identifies the start and completion dates for significant work activities. Sections 2.1 and 2.3 discuss the remedial tasks in greater detail (these remedial activity tasks were also detailed in Section 2.5 of the Implementation Plan). Section 2.2 discusses the preliminary remediation activities.

TABLE 1-1 Activity Sequence continued

Start Date	Finish Date	Dur
23SEP96	11NOV96	36
23SEP96	11NOV96	36
23SEP96	25NOV96	46
25SEP96	10OCT96	12
25NOV96	09DEC96	11
BUILDING 67		
20AUG96	10OCT96	38
25SEP96	26SEP96	2
25SEP96	24DEC96	65
14OCT96	15OCT96	2
BUILDING 72		
04NOV96	04NOV96	1
05NOV96	05NOV96	1
06NOV96	06NOV96	1
11NOV96	11NOV96	1
11NOV96	27NOV96	13
02DEC96	03DEC96	2
ORE SILO SIZE REDUCTION TSS		
12FEB96	13FEB96	2
13FEB96	13FEB96	1
14FEB96	21FEB96	6
21FEB96	26FEB96	4
26FEB96	29FEB96	4
04MAR96	03APR96	23
DEMOBILIZATION & PROJECT CLOSEOUT		
24FEB97	27JUN97	90
	27JUN97	0



FACILITIES CLOSURE & DEMOLITION PROJ
PLANT 1 COMPLEX D & D - PHASE I

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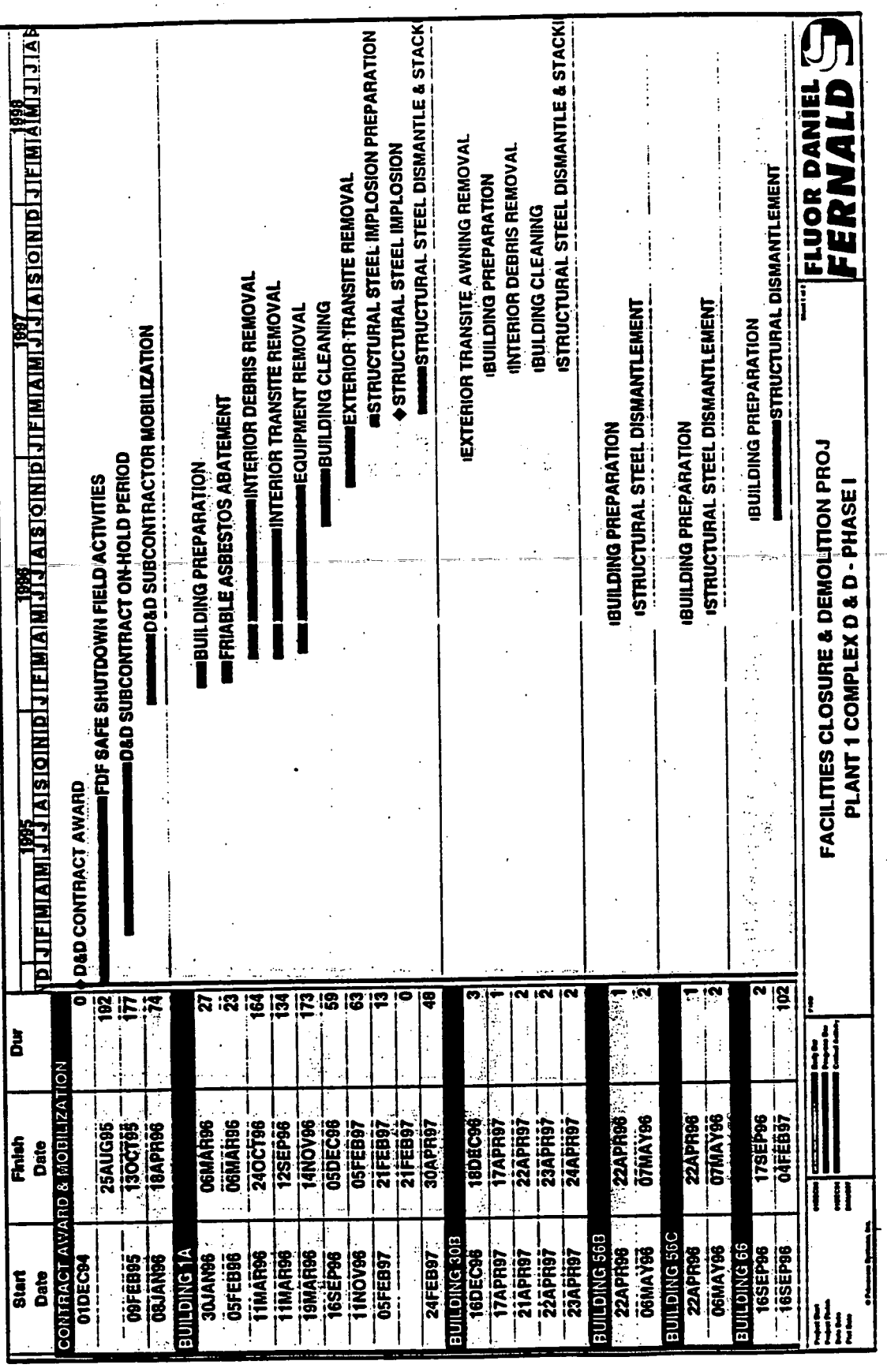
TABLE 1-1 Activity Sequence



2.0 REMEDIATION APPROACH

The performance specifications referenced in this Project Completion Report were provided to the U.S. EPA and the Ohio EPA in the Operable Unit 3 (OU3) Remedial Design/Remedial Action (RD/RA) Work Plan for Interim Remedial Action (DOE 1995). Attachment A provides a concise listing of the eleven changes to the performance specifications, which were executed during the project using Design Change Notices (DCNs), including the basis for the eleven changes. Note: all of the DCNs are continuations of the changes made during the Plant 4 D&D.

2.1 FEMP Preparatory Activities

The Plant 1 Complex - Phase I Implementation Plan identified six remedial tasks that were to be performed prior to and during D&D field activities. Tasks I and II are programmatic removal actions and serve as prerequisite tasks to D&D. Three of the remedial tasks were completed prior to the start of D&D field activities and are described below. The remaining three remedial tasks are described in Section 2.3.

2.1.1 Preparatory Action: Inventory Removal (Task I)

In accordance with Removal Action No. 9 - Removal of Waste Inventories, existing waste/product inventories were removed from Building 1A and Building 66 by FEMP waste management personnel, and transported to the interim storage facilities as described in Section 3 of the Implementation Plan.

2.1.2 Preparatory Action: Safe Shutdown (Task II)

In accordance with Removal Action No. 12 - Safe Shutdown, production residual hold-up material was removed from Plant 1 Complex - Phase I (Buildings 1A and 66 only) by FEMP personnel using Safe Shutdown standard operating procedures. Residual hold-up material was collected, containerized, and transported to the interim storage facilities. Final disposition of the material will be included in the Removal Action No. 12, Final Closure Report. Types and quantities of residual hold-up material were reported in Section 3.1 (Building 1A) and Section 3.6 (Building 66) of the Implementation Plan.

2.1.3 Hazardous Waste Management Units (Task III)

The Plant 1 Complex - Phase I Implementation Plan identified one solid waste management unit (SWMU) and four inactive HWMUs. These units are listed in Table 2-1.

The Plant 1 Storage Building (Bldg.67) foundation was declared HWMU No. 25 due to storage of 35 drums of material meeting RCRA hazardous waste criteria in excess of the 90-day storage limitation per Ohio Administrative Code (OAC) 3745-52-34 and 40 Code of Federal Regulations (CFR) 262.34(b). Thirty-five of the drums stored in Building 67 were designated as RCRA hazardous waste containing EPA hazardous waste identification codes for ignitable (D001), corrosive (D002), chromium (D007), and lead (D008). The drums were removed from Building 67 and placed in an appropriate RCRA interim hazardous waste storage area.

Attachment A of the Ohio EPA Director's Findings and Orders, June 6, 1996, lists HWMU No. 25, Plant 1 Storage Building (Bldg.67) slab as a HWMU to be closed using a RCRA/Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) integrated process. The integrated process strategy is described in Section 3.5.3 of the OU3 Integrated RD/RA Work Plan, May 1997. HWMU No. 25 has now been decontaminated in accordance with the requirements of the RCRA/CERCLA integrated process. The certification

of closure will be discussed after the slabis excaveated in accordance with ths Soil Characterization and Excavation Project group.

Table 2-1 Hazardous Waste Management Units Status

Inactive Units in the Plant 1 Complex	Status
HWMU No. 12, Wheelabrator Shotblaster (Bldg. 66)	Reclassified to SWMU March 27, 1995
HWMU No. 13, Wheelabrator Dust Collector (Bldg. 66)	Closure Certification approval received from Ohio EPA April 5, 1996
HWMU No. 26, Detrex Still (Bldg. 1A)	Closure Certification approval received from Ohio EPA November 27, 1995
HWMU No. 53, Safe Geometry Sump (Bldg. 1A)	Closure verbally approved in a meeting with Ohio EPA on March 2, 1995
HWMU No. 25, Plant 1 Storage Building (Bldg.67) -Slab	Remediated in accordance with Attachment A of the Ohio EPA Director's Findings and Orders, June 6, 1996

Loose contamination was removed from Building 67 interior surfaces and structural steel using high efficiency particulate air (HEPA) filtered vacuuming. HWMU No. 25 was decontaminated using high pressure water spray. The wastewater was pumped from the building, using skid mounted pumps with a 20 micron pre-filter and a 5 micron filter, into four 55-gallon drums located in a temporary diked area. The drums were sampled for total metals (chromium, lead). The decontamination rinseate results are presented in Table 2-2. Approximately 220 gallons of decontamination water was generated from HWMU No. 25, Plant 1 Storage Building (Bldg 67).

Table 2-2 HWMU No. 25, Plant 1 Storage Building (Bldg. 67) Decontamination Rinseate Results[1]

Constituent of Concern[2]	Decontamination Wastewater (composite sample)	Ohio EPA RCRA Closure Guidance Decontamination levels
Chromium (total)	26.6 parts per billion	5.0 parts per million (ppm)
Lead (total)	223.8 parts per billion	5.0 parts per million (ppm)

[1] Note: Building decontamination water was not generated from any other building in this complex. However, construction debris and equipment wash water was generated and managed as described in Section 3.1.2.

[2] Based on process knowledge for the decontamination water flash point and pH analysis were not appropriate.

2.2 Preliminary Remediation Activities

Prior to onsite activities by the D&D subcontractor, the FEMP established the areas (break room, clean room, and shower facilities) prescribed in Specification Section 01515 (Mobilization). The subcontractor prepared work plans on material handling, containerization, access/egress and construction boundary zones as required in the Specification. These subcontractor work plans were reviewed and accepted by FEMP Project Management. The subcontractor provided their own equipment, materials, and support trailers. The equipment was inspected by FEMP Project Management and surveyed by FEMP radiological control technicians before being brought on site. Job site permits and health and safety plans were reviewed and posted as specified in Specification Section 01515. The subcontractor provided work plans that described how adjacent facilities would be protected during D&D and how fugitive emissions would be controlled (Specification Section 03315).

2.0 REMEDIATION APPROACH

The performance specifications referenced in this Project Completion Report were provided to the U.S. EPA and the Ohio EPA in the Operable Unit 3 (OU3) Remedial Design/Remedial Action (RD/RA) Work Plan for Interim Remedial Action (DOE 1995). Attachment A provides a concise listing of the eleven changes to the performance specifications, which were executed during the project using Design Change Notices (DCNs), including the basis for the eleven changes. Note: all of the DCNs are continuations of the changes made during the Plant 4 D&D.

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The Plant 1 Complex - Phase I Implementation Plan identified six remedial tasks that were to be performed prior to and during D&D field activities. Tasks I and II are programmatic removal actions and serve as prerequisite tasks to D&D. Three of the remedial tasks were completed prior to the start of D&D field activities and are described below. The remaining three remedial tasks are described in Section 2.3.

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Loose contamination was removed from Building 67 interior surfaces and structural steel using high efficiency particulate air (HEPA) filtered vacuuming. HWMU No. 25 was decontaminated using high pressure water spray. The wastewater was pumped from the building, using skid mounted pumps with a 20 micron pre-filter and a 5 micron filter, into four 55-gallon drums located in a temporary diked area. The drums were sampled for total metals (chromium, lead). The decontamination rinseate results are presented in Table 2-2. Approximately 220 gallons of decontamination water was generated from HWMU No. 25, Plant 1 Storage Building (Bldg 67).

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2.2 Preliminary Remediation Activities

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2.3 Remediation Activities

2.3.1 Asbestos Removal (Task IV)

Asbestos removal was conducted in accordance with Specification Section 01516 and Removal Action No. 26 - Asbestos Abatement. Table 2-3 identifies the type of asbestos removed from four buildings in this complex. The category identified as "Friable Asbestos" typically was thermal insulation on pipes and equipment. Table 3-1 identifies the material management.

Table 2-3 Asbestos: Locations and Types

	BLDG 1A	BLDG 30B	BLDG 66	BLDG 72
Friable Asbestos	X		X	
Interior Transite	X		X	
Exterior Transite	X	X		X
Asbestos-Containing Floor Tile	X		X	

In Buildings 1A and 66, to remove the floor tiles, containment structures were constructed in accordance with Specification Section 01516. The floor tiles were pried up and containerized. The mastic floor adhesive also contained asbestos fibers. Sentinel 7200 mastic remover, a non-RCRA regulated petroleum-based compound was used to remove the mastic from the subflooring. The mastic was collected and managed with the removed tiles, as non-regulated asbestos-containing material (ACM).

2.3.2 Surface Decontamination (Task V)

The Plant 1 Complex - Phase I structures were cleaned prior to removal of their exterior siding or structural demolition. Loose contamination was removed from interior surfaces and structural steel prior to exposing those surfaces to the environment. The cleaning process consisted of HEPA vacuuming. Fixatives/encapsulants were applied to the interior surface of the exterior transite, concrete, and structural steel whenever criteria for removable contaminants could not readily be met by vacuuming alone. All surface cleaning and fixative/encapsulation was performed in accordance with Specification Section 01517.

In addition to HEPA vacuuming and the application of fixatives/encapsulants, selected concrete surfaces were scabbled to reduce elevated levels of fixed radiological contamination. These areas were selected to enhance air emission control during the felling of the building.

To minimize releases of contamination from the Plant 1 Complex - Phase I structures Specification Section 01517 contained job-specific performance criteria for opening the buildings to the environment. This specification was modified during the project without changing the substance of Specification Section 01517. The three design changes related to this specification are provided in Attachment A as DCNs 3, 6 and 9.

2.3.3 Above-Grade Dismantlement (Task VI)
Demolition debris removal operations, interior and exterior equipment removal, interior transite removal, exterior transite removal, structural steel removal, and related support activities (lifting and rigging, ventilation, and containment) were conducted in accordance with Specifications Sections 03315, 05126, 07415, 14955, 15065 and 15066. Cutting operations were performed by the remediation subcontractor within the project boundaries. All of the DCNs in Attachment A were developed as lessons learned and improved work procedures during the field activities for Plant 7 and Building 4A Complex D&D activities.

Specification Section 03315 allowed above-grade concrete and concrete masonry block to either be cleaned or scabbled to meet clearance requirements. This Specification was modified by DCN 8 to retain building ramps and curbing with the foundations which were then sealed and will remain in place until the below-grade remediation activity occurs. The modification enhances storm water run-off control and that radiological contamination will remain in place until these foundations are removed as part of the at- and below-grade excavation.

2.3.4 Structural Steel Demolition
The Plant 1 Complex - Phase I structural steel and miscellaneous steel consisted primarily of the following: steel siding, roofing, beams, columns, floor plate/decking, stairs and handrails. Except for Building 1A and TSS, all other buildings were demolished using track mounted mechanical shears. The structural steel demolition of Building 1A by implosion and shearing consisted of five main steps and was conducted in accordance with Specification Section 05126 and the Detonation Coordination Plan:

1. Initial Preparation: Support columns were prepared for implosion by mechanically and chemically removing the paint from areas that required pre-cutting in preparation for explosive charge placement. The columns were pre-cut at strategic locations. The paint chips were collected and managed in accordance with Specification Section 01120.

2. Final Preparation: Access to the area was limited and barricades were erected to keep personnel at a safe distance in accordance with the Plant 1 Detonation Coordination plan. Nonelectrical detonators, of various delays, were placed throughout Building 1A. Prior to the implosion, the structural steel was wet down to reduce the potential for airborne emissions.

3. Implosion: Detonation of the shape charges and gelatin dynamite laterally 'kicked' the ground floor structural columns. The columns on the first, second, and third floors were severed by the cutting shape charges. The result left the structure at heights within reach of the trackhoe-mounted hydraulic shearing equipment.

4. Post-Implosion Inspection: After the implosion, the area was inspected for undetonated shape charges. No undetonated charges were found.

5. Shearing: The collapsed structural steel was sheared using hydraulic shears mounted on a trackhoe. Water was applied during the cutting to mitigate fugitive dust emissions. After the steel was sheared, a trackhoe mounted shear was used to stockpile the steel on the Building 1A foundation. Structural steel from Buildings 30B, 66 and 72 was also placed on the Building 1A foundation. Building 67 structural steel was stockpiled on the Building 67 foundation. The Building 67 structural steel has the potential for fixed thorium contamination and therefore was kept separate from the rest of the structural steel from the complex.

2.4 Large Scale Technology Demonstration Project

Nine technology demonstrations were conducted as part of the FEMP's Plant 1 LSTD Project during the Plant 1 Complex - Phase I D&D. These nine demonstrations were designed to address FEMP D&D technology needs by providing a means to assess effective safety and cost features under field conditions. The nine demonstrations were:

- Spray Vacuuming
  - This was one of two technologies demonstrated for use for decontamination when high pressure water spray washing would be unacceptable (as with mass restricted fissile materials). Steam was used as the cleaning media in this demonstration.

- Soft Media Blasting
  - This was the second decontamination demonstration for replacement of water as the cleaning media. Small compressible sponges were the media used in this demonstration.

- Low-Density Cellular Concrete Void Filling
  - This demonstration was one of two designed to address the need to fill voids in complex equipment intended for burial. Void filling addresses the need to protect disposal cells from future subsidence when the equipment housing may be expected to decompose.

- Foam Void Filling
  - Expanding Polyurethane foam was demonstrated as a void filling technology for the same purposes as the concrete technology described above.

- Field Raman Spectroscopy
  - This demonstration was the first of two that were designed to evaluate the potential for performing characterization of D&D structures in real time without sample collection.

- Laser Induced Fluorescence
  - This demonstration was the second of the characterization technologies demonstrated. Laser Induced Fluorescence capitalizes on the visible fluorescence spectrum emitted by uranium compounds when photo-electrons are excited by light energy.

- Visual Inspection
  - Two camera technologies were evaluated for internal piping inspection, supporting the inspection and verification that piping is free of interior contamination.

- Oxy-Gasoline Cutting Torch
  - This demonstration evaluated the speed and effectiveness of the oxy-gasoline torch versus the baseline technology of oxy-acetylene cutting.

- VecLoader HEPA Vacuum
  - This demonstration addressed the need to reduce the airborne particulate concentrations associated with the task of removing mineral wool insulation from the exterior structure walls. HEPA-filtered vacuum hoses were used to vacuum remove batt insulation.

These nine technologies are further detailed in a report which is provided as Attachment E.

3.0 MATERIAL HANDLING, STAGING AND INTERIM STORAGE

This section focuses on the material generated from the D&D activities, decontamination wastewater, the project-specific air monitoring, and anticipated material disposition.

3.1 Materials Management

3.1.1 Primary Materials Management

Primary materials are the materials removed from the Plant 1 Complex - Phase I structures (e.g., piping, flooring, windows, conduit and wiring). This material was segregated according to the material segregation and containerization criteria in Specification Section 01120 which was revised and reissued as Section 01120, Part 6, Exhibit M. Material handling is discussed in greater detail in Section 3.2.

3.1.2 Secondary Materials Management

Secondary materials are generated from the D&D activity (e.g., cleaning water, personal protective clothing). The metal debris (e.g., conduit, pipe, process and non-process equipment) was cleaned using a high pressure, low volume water wash as described in the Implementation Plan.

For the Plant 1 Complex - Phase I, except for Building 67 - Thorium Warehouse, wash water from the equipment and debris cleaning process was collected as generated. Using skid mounted pumps, with a 20 micron pre-filter and a 5 micron filter, the water was transferred into twelve 165- gallon tanks for storage and sampling. These twelve tanks were located in a temporary diked area. The water was then sampled for uranium enrichment. The equipment washwater was collected and sampled in the 165-gallon tanks for uranium enrichment to ensure that the uranium (U-235) concentration and volume did not exceed the 1.00% U-235 limit, which is the only specific scceptance criteria that currently has been established at the Advanced Wastewater Treatment facility. After review of the uranium enrichment analysis, the water was transferred to one of the three 3,000-gallon project storage tanks, located in a temporary diked area, using skid mounted pumps.

The wastewater sampling from the 3,000 gallon tanks was conducted as described in the attached Sampling and Analysis Plan (Attachment C). The water was analyzed for Plant 1 Complex - Phase I contaminants of concern: thorium-230, uranium-235 and total uranium. Quality Assurance/Quality Control samples were collected in accordance with applicable project Data Quality Objectives. Analytical results are provided in Attachment C. Approximately 15,000 gallons of uranium wastewater, includes the water from the LSTD Project as discussed in Section 2.4, was generated during D&D activities (note: Safe Shutdown activities did not generate wastewater). After review of the analytical data, the effluent was then transferred to the FEMP Wastewater Treatment System (WWTS) where it was managed in accordance with the WWTS material handling procedures and discharged in accordance with the FEMP's National Pollutant Discharge Elimination System (NPDES) permit, #1I000004*ED.

Building 67 decontamination water, from HWMU No. 25, was collected and stored separately in four 55-gallon drums as described in Section 2.1.3. This water was sampled in accordance with the SAP (Attachment C). The Building 67 water was managed through the FEMP WWTS and discharged in accordance with the FEMP's NPDES permit. Review of the analytical results did not indicate any concentrations exceeding the WWTS acceptance criteria and are within the normal parameters of the water managed in the wastewater treatment system. The decontamination water was treated with other FEMP wastewater in accordance with the site NPDES Permit conditions and limitations.

3.2 Staging, Interim Storage, and Disposition

Prior to D&D activities drummed materials were removed from Buildings 1A and 66 (a total of 271 55-gallon drums). The drums were transported to other locations on-site approved for the storage of the material awaiting off-site disposal.

Except as noted in Table 3-1, the current plan for the disposal of material generated from the Plant 1 Complex - Phase I D&D is for placement in the OSDF. The following table provides a summary of the categories and volume (in cubic feet) of material generated during the Plant 1 Complex - Phase I D&D project. This material is being managed in accordance with the strategy outlined in the OU3 Integrated RD/RA Work Plan, which adopts Removal Action No. 17, material management strategies. The material to be shipped to NTS is also included in Table 3-1. This material is tracked using the Sitewide Waste Information, Forecasting and Tracking System (SWIFTS). Three SWIFTS reports are included as Attachment D. The storage location codes are:

004B - is the Plant 4 gravel area
0080 - is the Building 80 gravel area
02/3 - is the Plant 2/3 Pad
0007 - is the Plant 7 gravel area
W800004 - Plant 1 Pad
W800006 - Plant 1 Pad - stockpile
010A - is the Building 10 Pad
0001 - is the Plant 1 Pad
026B - is the gravel area across
W800002 - Plant 1 Pad, Phase E area
W800005 - Plant 1 Pad
W800007 - Plant 7 East - stockpile

TABLE 3-1 - OU3 Project Debris Generation Summary

Material Category	Material Description	Weight (pounds)	Volume cubic feet (ft^3) actual bulk	Location - Container Type and Quantity or Stockpile if in bulk
A	Accessible Metal	868,000 58,000	29,597 1,953	W800004 - Stockpile W800006 - Stockpile
B	Inaccessible Metal	365,980 19,346 4 unweighed	28,350	0001 - 2 ROBs; 0007 - 3 ROBs; 010A - 2 ROBs; 02/3 - 14 ROBs; 026B - 1 ROB; W800002 - Stockpile
C	Process Related Metal	137,150 5 unweighed	12,035	0001 - 4 ROBs & 5 ISOs 0007 - 1 ROB & 1 ISO 004B - 1 ISO 010A - 1 ROB ROBs are currently being repackaged for shipment to NTS
D	Painted Light-gauge Metal	0	0	N/A
D	Painted Light-gauge Metals (lead)	4732	182	0001 - 2 SWMBs
E	Concrete	281,452 299,040 3 unweighed	4,674 2,670	0001 - 53 SWMB; W800005 - Stockpile
F	Acid Brick	0	0	N/A

Material Category	Material Description	Weight (pounds)	Volume cubic feet (ft^3) actual bulk	Location - Container Type and Quantity or Stockpile if in bulk
G	Nonfriable Asbestos	314,000	3,545	W800007 - Stockpile (Transite Panels)
H	Friable Asbestos	6,870 2 unweighed	3,075	0001- 3 ISOs
I	Miscellaneous	105,970 30 unweighed	19,025	0001- 3 SWMBS; 0001 - 8 ROB; 0007 - 1 ROB; 0080 - 2 ROBs; 02/3 - 6 ROBs; 026B - 3 ROBs 010A - 3 ROBs; 0001 - 17 (55) gal drum
J	Product, Residues, and Special Material - Floor Sweepings (47) - Vacuum Bags (4) - Capacitor (1) - MagFluoride (1) - Aerosol Cans (13) - Oil Soaked Rags (9) - Sludges (4) - PCB material (1) - Lead paint chips (1) - Ballast (1) - Bird Carcasses (1)	16,228 19 unweighed	614	0001 -83 (55 gal) Drums

3.3 Environmental Monitoring

During the D&D of the Plant 1 Complex - Phase I project supplemental environmental radiological air monitoring was conducted to assess the project impact on air quality and the environment. Under the requirements of the Plant 1 Complex - Phase I Implementation Plan, four continuous air monitors were used for the project to supplement the site-wide air monitoring network.

The project-specific air monitoring locations are numbered P1-1 to P1-4 (Figure 3-1). The Plant 1 Complex - Phase I environmental air monitoring data, in picoCuries per cubic meter (pCi/m^3) of total uranium, from December 15, 1995 through May 23, 1997, are summarized in Table 3-2.

TABLE 3-2 - Summary of Project Air Monitoring Data[1]

AMS Location	Minimum pCi/m^3	Average pCi/m^3	Maximum pCi/m^3
P1-1	2.33E-05	9.35E-04	6.10E-03
P1-2	3.48E-05	8.27E-04	4.12E-03
P1-3	5.24E-05	7.05E-04	7.31E-03
P1-4	3.06E-04	3.73E-03	5.19E-02

[1] Based on DOE Order 5400.5, an internal action level of 0.1 pCi/m^3 has been set for evaluating the conditions/activities related to increased airborne uranium concentrations.

The highest airborne radiological activity was registered from February 21 to 28, 1997, by the Plant 1 Complex - Phase I project-specific air samplers. The maximum airborne uranium activity during the D&D of the Plant 1 Complex - Phase I was 2.2E-02pCi/m^3. This level was recorded at air monitor P1-4, located due east of Building 1A (See Figure 3-1) during the February 21 to 28, 1997 sampling period. The level was well below the FEMP action level of 0.1 pCi/m^3. Based on a review of Plant 1 work activity during this period, the implosion of Building 1A is the most likely cause of the higher airborne uranium levels.

Air monitor P1-4 recorded a value of 5.19E-02 pCi/m^3 for May 23, 1997. This value is attributed to the rapid pressurization and subsequent venting of a white metal box containing uranium bearing wastes, and is not related to the Plant 1 - Phase I D&D activities. The white metal box was in Building 30A, adjacent to monitor P1-4 (see Figure 3-1), when the reaction occurred.

The Department of Energy (DOE) Order 5400.5 limit at the boundary fence line, for all pathways, is 100 milliRem/year. Chapter III of this Order, Derived Concentration Guides (DCG) for Air and Water, identifies the U-Natural inhalation DCG as 1×10^{-13} Curie per milliliter (Ci/ml), which equates to 0.1 pCi/m^3 per year. This level serves as the FEMP internal action level to evaluate the project conditions and activities which are causing the increase in airborne uranium concentrations. Additional air monitoring locations and graphical summaries of air monitoring results are provided in Attachment B.

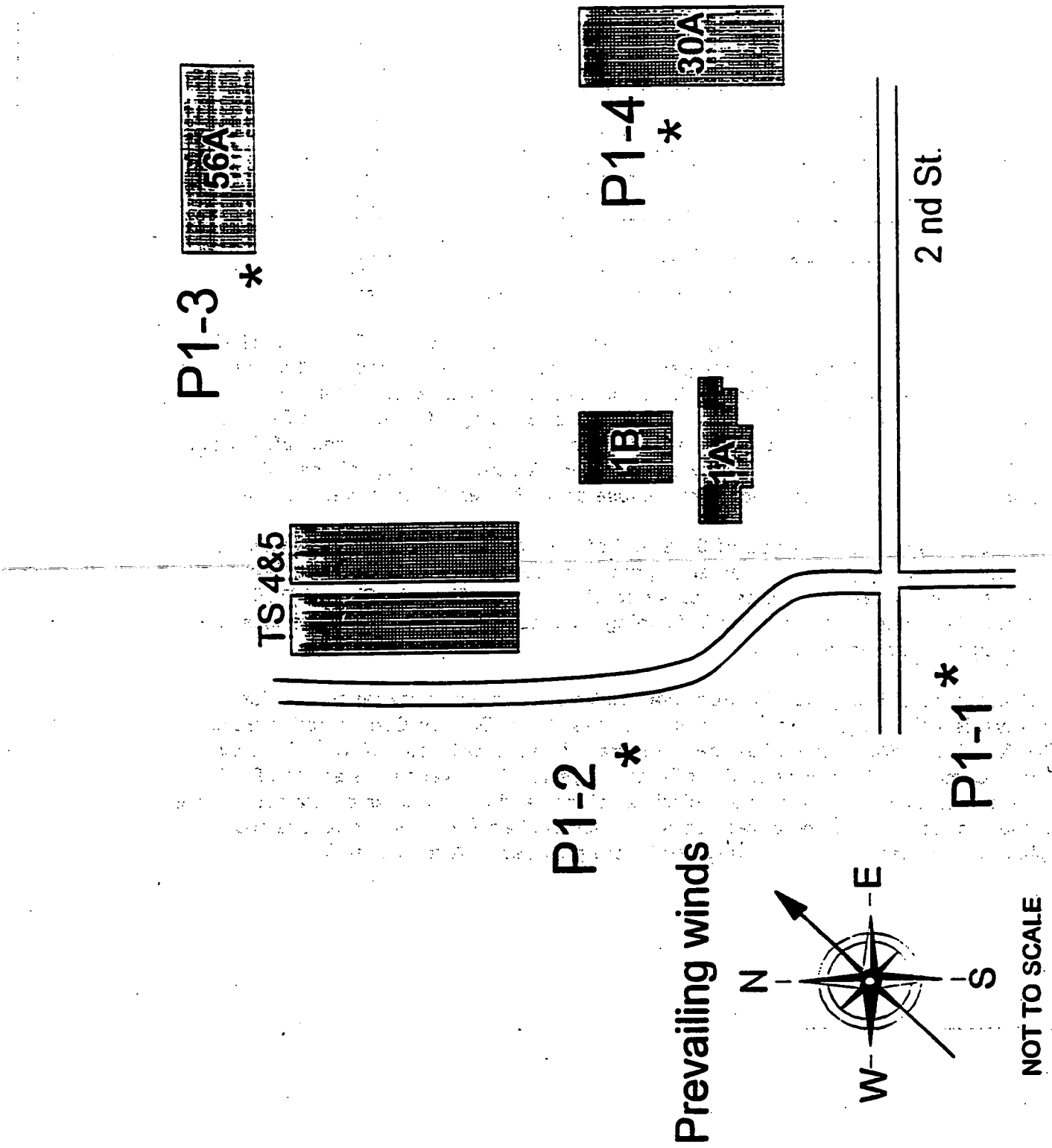


FIGURE 3-1 Plant 1 Complex - Phase I Project-Specific Air Monitoring System Locations

4.0 LESSONS LEARNED

During the Plant 1 Complex - Phase I D&D project several work practice improvements/ Lessons Learned were documented. Below is a summary of the Lessons Learned:

1. The D&D was performed in a very safe manner with no lost time accidents. However, there were five minor Occupational Health and Safety Recordable injuries: a lacerated finger that occurred while stacking metal in a white metal box required sutures; a second degree burn on a worker's palm occurred when hot slag from the cutting torch demonstration dropped inside his welding glove; another finger laceration; a knee contusion, and a wrist sprain. These injuries were determined to have occurred because of "worker inattention." The importance of focusing all work activities around safety at all times was reinforced to the workers.

2. Adherence to safety procedures and safe work practices prevented injury from the two lifting operation incidents. In follow-up to these two incidents the importance of safety procedures and safe work practices was reinforced to all project and lift operation workers.

   - The first incident occurred, after all safety precautions were in place, under the lift of a double-pane window assembly. During the lifting operation the hoisting plan was altered by field personnel without, subcontractor management or FDF approval, and the assembly collapsed and folded in upon itself. Due to the safety precautions followed on the ground no one was injured. Workers were retrained on the importance of following plans and obtaining approval for changes.

   - The second incident occurred shortly after a rigger had secured a choker strap around the last remaining exhaust stack on the Building 1A roof. As the crane hook was being moved to hook the strap, the metal stack broke loose and rolled off the roof. Due to the deteriorated/corroded condition of the stack, it folded under its own weight and collapsed, breaking away from the roof. Lift safety procedures required working from above the stacks and that the area below the lift be barricaded off with two safety spotters on the ground to ensure that no one entered the barricaded area.

On both occasions following these safety procedures protected workers and no injuries occurred.

3. For the Building 1A implosion, Specification Section 03315, 3.1.K, regarding concrete remaining in the structure during implosion, was changed by DCN 9. The DCN required both slab encapsulation and wrapping with geotextile fabric that was wetted prior to implosion. Since no shape charges were allowed to be attached to the concrete, no significant breakup of the concrete walls or slabs occurred. Based on this observation of actual field conditions and air monitoring data, it is recommended that using either encapsulant or geotextile fabric would be sufficient, instead of using both. It is anticipated that future D&D operations will not need to use both dust suppression technologies during implosions.

5.0 SUMMARY

This Project Completion Report for the Plant 1 Complex - Phase I documents that the above-grade portions of the complex were decontaminated and dismantled in accordance with the OU3 Plant 1 Complex - Phase I Implementation Plan for the above-grade D&D Project at the FEMP. The Lessons Learned are in accordance with the revised strategies presented in the OU3 Record of Decision and the OU3 Integrated RD/RA Work Plan. This Project Completion Report was prepared in the format described in the OU3 Integrated RD/RA Work Plan.

The Remedial Tasks identified in the Implementation Plan: 1) Inventory Removal; 2) Safe Shutdown; 3) Hazardous Material Management Units; 4) Asbestos Removal; 5) Surface Decontamination; and 6) Above-Grade Dismantlement, were successfully completed in a safe and environmentally sound manner well ahead of schedule. Changes to the specifications referenced by the Implementation Plan are briefly described in Attachment A. The material handling procedures, material volumes and storage locations are also provided. Significant project-specific air monitoring data from the Plant 1 Complex - Phase I were provided and discussed. The Lessons Learned section identifies specific actions to improve future D&D project field activities.

REFERENCES

Meeting notes, Tom Walsh, FDF, meeting between Ohio EPA and U.S. DOE that occurred March 2, 1995, during which Ohio EPA verbally accepted the Closure Certification for HWMU No. 53, Safe Geometry Sump (Building 1A).

Ohio EPA, March 27, 1995, letter, concurrence to reclassify HWMU No. 12, Wheelabrator Shotblaster (Building 66) as a solid waste management unit (SWMU).

Ohio EPA, February 9, 1996, letter, approving the *Plant 1 Complex - Phase I Implementation Plan for Above-Grade D&D (March 1996, REV. 3).*

U.S. EPA, February 28, 1996, letter, approving the *Plant 1 Complex - Phase I Implementation Plan for Above-Grade D&D (March 1996, REV. 3).*

U.S. Department of Energy, document, *Plant 1 Complex - Phase I Implementation Plan for Above-Grade D&D (March 1996, REV. 3).*

Ohio EPA, April 5, 1996, letter, acceptance of Closure Certification for HWMU No. 13, Wheelabrator Dust Collector (Building 66).

Ohio EPA, June 6, 1995, *Director's Findings and Orders,* Attachment A, directs that HWMU No. 25, Plant 1 Storage Building (Building 67) - Slab be remediated in accordance under the RCRA/CERCLA integrated process.

Ohio EPA, November 27, 1995, letter, acceptance of Closure Certification for HWMU No. 26, Detrex Still (Building 1A).

Attachment A

PLANT 1 COMPLEX - PHASE I DESIGN CHANGE NOTICES

Plant 1 Complex - Phase 1 Design Change Notices

Design Change Notice #	Specification Changed	Change Description	Basis for Change
1 Rev.0	001120, 3.3.A.1 3.4.A.3.1	Change to read in part: "all containerization operations" Delete "in front of plywood sheets"	Technical corrections.
2 Rev.1	01120 Appendix A 01517, 2.1.B.2	Delete and replace with: "MSCC in Part 6, Exhibit M." Delete and replace with "For removing contamination on equipment, material, and debris the Subcontractor shall supply effluent storage tanks and secondary containment with a minimum liquid effluent storage capacity to allow 15 calender days storage without impacting Subcontractor operations. No one individual effluent storage tank shall have a capacity greater than 175 gallons and individual effluent storage tanks must be placed a minimum of 2 feet apart. For removing contamination during building cleaning the Subcontractor shall supply storage tanks and secondary containment with a minimum liquid effluent storage capacity to allow 15 calender days storage without impacting the Subcontractor operations. FERMCO will perform effluent sampling. After approval from the FERMCO Construction Contracts Manager, the Subcontractor shall transport the liquid effluent to Plant 8 and pump the liquid effluent into the Plant 8 sump."	Enriched equipment (greater than 0.95%) has been identified in Buildings 1A and 66.

Design Change Notice #	Specification Changed	Change Description	Basis for Change
2 Rev.1 (continued)	01517, 2.1.B.3	Add: "The Subcontractor shall store sludge resulting from cleaning operations in 55 gallon drums supplied by FERMCO. The filled drums shall be stored a minimum of 2 feet apart in a designed storage location approved by FERMCO with no more than 1,300 pounds Uranium, or Uranium containing sludge, in any one drum. Filled drums will be sampled by FERMCO for concentration and enrichment. After approval from the FERMCO Construction Manager, the Subcontractor shall transport the drums to the queuing area."	
	01517, 3.2.F	Insert at end of sentence, "as long as it does not exceed the effluent and sludge capacity restrictions described in Section 01517, 2.1.B.2 and 2.1.B.3."	
	01517, 3.2.G	Change second sentence to read: "Effluent and sludge shall be containerized in accordance with the requirements in Section 01517, 2.1.B.2 and 2.1.B.3."	
	07415, 3.3.B	Delete and replace with "All material shall be dispositioned in accordance with Part 6, Exhibit M."	Transite Panels are to be placed in stacked, wrapped bundles at the queuing area and not in containers. Structural steel and other unrestricted use metals (Category I) are to be placed on the Building 1A foundation.
	05126, 3.2.G	Delete	

Design Change Notice #	Specification Changed	Change Description	Basis for Change
2 Rev.1 (continued)	05126, 3.3.B	Delete and replace with "All material shall be cut and dispositioned in accordance with Part 6, Exhibit M. (NOTE: Additional requirements are detailed in Part 6, Exhibit K, Section 8.2)."	
3 Rev.1	15066, 3.1.A	Insert "Subcontractor shall seal openings of Category H-2 items as identified in Part 6, Exhibit M, after verification inspection by a FERMCO representative prior to movement from the immediate removal area. If a Category H-2 item fails inspection, then that item shall be deemed a Category H-4 item as identified in Part 6, Exhibit M."	The FERMCO requirement of radiologically surveying /scanning equipment and materials prior to exiting the containment of the building has been modified.
	15065, 3.1.A.1.c, 3.1.A.2.c and 3.1.A.3.c.	Insert at the end of each section "Subcontractor shall seal opening after cleaning and after verification inspection by a FERMCO representative."	Radiological surveying/ scanning will only be required to remove exterior siding or demolish a
	01120, 3.2.B.	Delete and replace with "Waste materials to be containerized into waste containers and sealed within a local containment area or building enclosure will require decontamination per Section 01517 of this specification package."	structure.

Design Change Notice #	Specification Changed	Change Description	Basis for Change
3 Rev. 1 (continued)	01517, 1.8.A.1	Delete and replace with "To remove equipment, material or debris from a local containment or enclosure, or to containerize, surfaces shall be free of visible process material as determined by a FERMCO representative. The definition of visible process material is: Visible process residues (green salt, yellow cake, etc.) On the interior or exterior surfaces of materials that is obvious to the eye and that if rubbed, would be easily removed. Stains, rust, corrosion, and flaking do NOT qualify as visible process material. If an item fails visual inspection the item shall be deemed a Category H-4 item and encapsulated or wrapped in accordance with Section 01517 3.2.C. of this specification package. All equipment, material, and debris are still considered to be radiologically contaminated."	
	01517, 1.8.A.2	Delete and replace with "Prior to removing the exterior siding of a structure and prior to demolishing a structure where the exterior siding is not removed, all non-porous surfaces (such as steel decking or columns) within the structure shall be below 10,000 dpm/100 cm^2 for total (sum of alpha and beta-gamma) removable radiological contamination and below 5,000 dpm/100 cm^2 beta-gamma removable radiological contamination and all above grade porous surfaces (such as concrete decking or wood) shall be below 1,000 dpm/100 cm^2 beta-gamma removable and 5,000 dpm/100 cm^2 beta- gamma fixed radiological contamination.	

Design Change Notice #	Specification Changed	Change Description	Basis for Change
3 Rev.1 (continued)	01517, 1.8.A.3	Delete and replace with "For Thorium contaminated equipment, materials, or structures the Radiological standards for contamination are found in Table 2-2, Summary of Contamination Values, of the DOE Radiological Control Manual, attached as Appendix A. For the purpose of removal from local containment or enclosure or for demolishing a structure, surfaces shall be below the level of removable contamination and below 10 times the level of total (fixed plus removable) contamination in Appendix A."	
	01517, 3.2.A.1	Delete and replace with "The Subcontractor shall remove contamination on equipment, materials, or debris in accordance with Specification Section 01517 1.8.A.1."	
	01517, 3.2.A.2	Delete and replace with "The Subcontractor shall remove or remove and fix contamination on all surfaces within the structure until the detected radiological levels are below the criteria as stated in Specification Section 01517 1.8.A.2 prior to removing the exterior siding from a structure and prior to demolishing a structure where the exterior is not removed.	
	01517 3.3.A	Delete and replace with "After removing or removing and fixing contamination, the Subcontractor shall notify the FERMCO Construction Manager to arrange for a re-survey of the facility structure to ensure that surface contamination is below criteria in Specification 01517 1.8.A.2."	

Design Change Notice #	Specification Changed	Change Description	Basis for Change
4 Rev.0	01120,3.1.D.3 and 3.1.D.4 01120, 3.1.D.5	Delete Insert at end of sentence "with clamping devices, pins, or other FERMCO approved method."	Container preparation of Large Metal Boxes is the responsibility of FERMCO.
5 Rev. 0	01517, 3.2.B 01517, 3.2.D.1 01517, 3.2.E	Insert at end: "Other acceptable methods include the use of a 1,000 psi propane or kerosene powered steam cleaner." Revise as follows to include the steam cleaning alternative: "Hydrocleaning or steam cleaning water." Revise as follows to include the steam cleaning alternative: "If hydrocleaning or steam cleaning is used, the Subcontractor shall ..."	The uses of a high pressure steam cleaner to remove contamination from equipment and structural surfaces will minimize the volume of waste water generated during cleaning activities; thus, reducing the impact of the nuclear criticality water restrictions on the subcontractor.

Design Change Notice #	Specification Changed	Change Description	Basis for Change
6 Rev. 0	01517, 1.8.A.4	Add the following information as new Section 1.8.A.4 under Section 1.8 (PROJECT CONDITIONS): "During equipment and demolition debris removal operations, removable contamination levels on surfaces shall be at or below 10,000 dpm/ 100 cm^2 (maximum loose contamination) for beta/gamma through field monitored swipes performed by FERMCO. If the levels on equipment and demolition debris exceed this limit, then engineering controls shall be applied by the Subcontractor until radiological levels are below limits. The engineering controls may include, but are not limited to: 1) clean surfaces of the materials to be removed (HEPA vacuuming, hydrocleaning, wet wiping, etc.), 2) apply stabilizer coatings in accordance with Section 01517 2.1.C to all exposed surfaces, or 3) implement local containment around the applicable equipment or demolition debris being removed. Any loose accumulated material or visible contamination shall be vacuumed to the extent practical prior to equipment and demolition debris removal activities. If cleaning or stabilizer coating application is not reasonable or feasible, local containment with appropiate ventilation will be implemented for the affected work area. Local containment shall be implemented in accordance with Section 15067. Other engineering controls may be acceptable upon review and approval by the FERMCO Construction Manager."	This change is designed to implement engineering controls to minimize airborne releases during the removal of equipment and demolition debris. This approach requires cleaning, applying stablizers, or containing the system prior to removal. 1. Removable contamination levels within the D&D complexes must be controlled to 1) minimize airborne contamination levels that workers are exposed to and 2) minimize contamination events. 2. FDF Health and Safety personnel must be involved in the determination of appropiate vestibule and local containment locations to meet DOE expectations on reducing airborne contamination within the D&D projects.

Design Change Notice #	Specification Changed	Change Description	Basis for Change
6 Rev. 0 (continued)	01517, 3.2.J	Insert the following item as Section J under 3.2 (APPLICATION): "The Subcontractor shall remove or remove and fix contamination on equipment and/or demolition debris within the building or structure in accordance with Section 01517 1.8.A.4."	
	01517, 3.3.A.	Modify Section 3.3.A to read as follows: "After removing or removing and fixing contamination to support removing the exterior siding of a structure, the Subcontractor shall notify the FERMCO Construction Manager to arrange for a re-survey of the facility structure to ensure that surface contamination is below criteria as stated in Specification 01517 1.8.A.2."	
	15067, 1.1.B.1	Modify Section 1.1.B.1 to read as follows: "Local containment - is an enclosure that is designed to maintain either 0.02-inch (four air changes per hour) or 0.1-inch (six air changes per hour) water gauge negative pressure within it structure based on location requirements to prevent airborne contaminated particulates from escaping to the outside environment (see Sections 3.1.F and 3.1.G)."	
	15067, 3.1.A	Modify Section 3.1.A. to read as follows: "The Subcontractor in coordination with FERMCO Health and Safety Division shall determine ...."	

Design Change Notice #	Specification Changed	Change Description	Basis for Change
6 Rev. 0 (continued)	15067, 3.1.C	Delete first sentence and replace with: "Typical design features on various local containments should include the following standardized features, where applicable: 1. Windows and mountings. 2. Glove ports. 3. Ease of cleaning. 4. Adequate interior illumination. 5. Connections for service lines, conduits, instrument leads, and ductwork. 6. Fire barriers. 7. Pressure differential readouts. 8. Attachments for interconnection of local containments."	
	15067, 3.1.F.	Insert the following as Section F under 3.1: "Local containment structures erected within enclosures shall be designed to be leak-tight and to maintain negative 0.02 inches water gauge of negative pressure within their structure. The ventilation system for this type of operation shall provide a minimum of four air changes per hour."	
	15067, 3.1.G.	Insert the following as Section G under 3.1: "If work is to be performed in an area where an enclosure does not exist, local containment structures utilized shall be designed to be leak-tight and to maintain 0.1 inches water gauge of negative pressure within their structure. The ventilation system shall provide a minimum of six air exchanges per hour as well as air locks for personnel and equipment entry/exit."	
	15067, 3.3.C.2.a	Delete Section 3.3.C.2.a and renumber all other sections from b through f to a through e.	
7	VOID.		

Design Change Notice #	Specification Changed	Change Description	Basis for Change
8 Rev.0	03315, 3.2.H.1	Omit the words 'building curbs' and add the sentence "Concrete ramps are to remain intact until the slab is remediated by the soil excavation project."	There are three reasons for incorporating this DCN: 1) to omit the requirement for removing the building curbs from Bldg. 1A. Leaving the curbs in place will aid in the control of water run-off after the dismantlement. 2) to omit the requirement for the removal of poured concrete walls within Plant 1 prior to exterior transite removal, allowing them to be felled with the structural steel at the time of the implosion. After the implosion, the concrete will be separated from the structural steel and placed into a container. 3) to leave the concrete ramps in place for movement of equipment and materials.
	03315, 3.2.J	Revise to state: "Interior concrete walls may be removed after opening the shell and/or the felling of the structure. All concrete shall be removed using only non-explosive methods. A water spray shall be used to minimize fugitive emissions during concrete removal."	

Design Change Notice #	Specification Changed	Change Description	Basis for Change
9 Rev.0	01517, 1.8.A.2	Delete and replace with the following: "Prior to removing the exterior siding of a structure and prior to demolishing a structure where the exterior siding is not removed, all non-porous surfaces (such as steel decking or columns) within the structure shall be below 10,000 dpm/100 cm^2 for total (sum of alpha and beta-gamma) removable radiological contamination and below 5,000 dpm/100 cm^2 beta-gamma removable radiological contamination and all above grade porous surfaces (asuch as concrete decking or wood) shall be below 1,000 dpm/100 cm^2 beta-gamma removable and 50,000 dpm/100 cm^2 (average) and 150,000 dpm/100 cm^2 (maximum) beta-gamma fixed radiological contamination. The average beta-gamma fixed radiological contamination limit is the average of the radiological contamination levels that exist within an individual 20 ft. X 20 ft. area (generally defined by plant column locations) and the maximum beta-gamma fixed radiological contamination limit is the highest permissible contamination levels within the 20 ft. X 20 ft. area."	1. FDF requirement for radiologically surveying/ scanning interior building surfaces has been modified. 2) The requirement for removing interior concrete slabs with the felling of the structure have been modified.
	03315 3.1.K	Delete and replace with: "Interior concrete slabs can be removed using methods similar to the interior wall removal. A second option is to remove interior slabs with the felling of the structure. This will require encapsulation of the slab and wrapping the slab with geotextile fabric that is wetted down with amended water prior to felling activities."	

Design Change Notice #	Specification Changed	Change Description	Basis for Change
10 Rev. 0	03315, 1.5.A.3.E	Revise to state: "Proof of a State Blasters License, a Federal ATF Permit, and a copy of liability insurance that covers the work ".	State of Ohio Blasters Licence not required for the Implosion of the Plant 1A structure.
	05126, 1.5.A.3.E	Revise to state: "Proof of a State Blasters License, a Federal ATF Permit, and a copy of liability insurance that covers the work "	
11 Rev. 0	07415, 3.1.A	Revise to read as follows: "Subcontractor shall maintain the integrity of the exterior of the building until the interior transite and insulation has been removed and encapsulant, lockdown, or surfactant has been applied to the interior surface of exterior panels. Encapsulation, lockdown or surfactant of interior surfaces of exterior panels is not required if the building interior passes an aggressive test for asbestos."	The FDF requirement for encapsulating the interior surface of the exterior transite has been modified. The modification establishes the requirement to encapsulate the interior
	07415, 3.2.A.1	Revise to read as follows: "If necessary, apply the encapsulant or lockdown to the interior surface of the exterior panels prior to removal. When encapsulant or lockdown is applied it shall be to provide visible coverage."	surface of exterior transite only when the surface is deteriorated or the asbestos clearance sampling does not meet the clearance criteria.

Attachment B

SUPPLEMENTAL ENVIRONMENTAL AIR MONITORING SAMPLING RESULTS FOR PLANT 1 COMPLEX - PHASE 1 D&D

SUMMARY REPORT - URANIUM IN AIR
FENCELINE MONITORS

Recent analytical results to: 05/27/97

	AMS Location	Uranium concentration ($pCi/m_3 \times 10_6$) 04/15/97	04/29/97	05/13/97	05/27/97
**	AMS-1B	855	407	694	195
	AMS-2	67	11	108	65
	AMS-3	352	109	413	650
	AMS-4	61	16	31	44
	AMS-5	31	15	15	61
	AMS-6	140	18	15	56
	AMS-7	24	13	41	33
***	AMS-8A	152	58	118	234
***	AMS-9B	192	44	188	323

* - Results have not been through verification process.

** AMS-1A location operational through 7/30/96, moved to location AMS-1B 7/31/96.

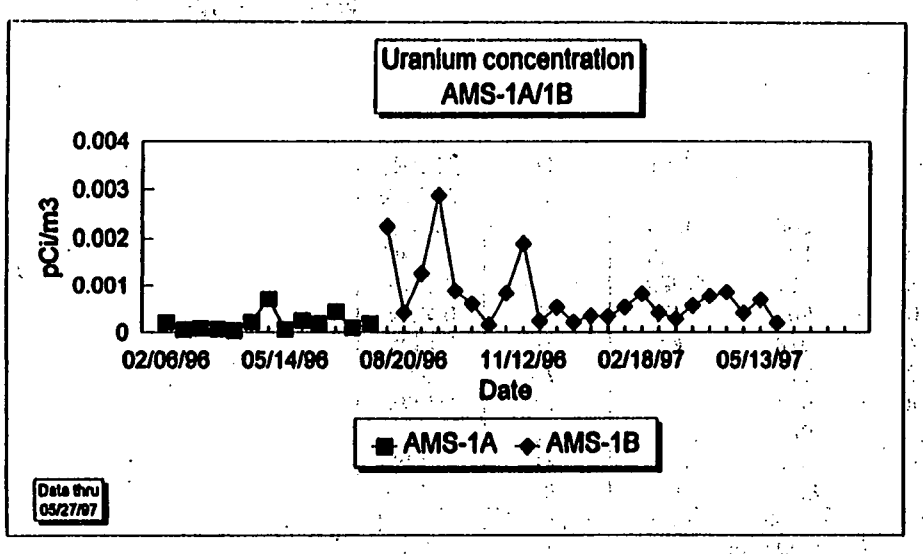
***AMS-8 and AMS-9A operational through 3/21/96, moved to locations AMS-8A and AMS-9B on 6/13/96.

1997 Cumulative Results

AMS Location	Uranium concentration ($pCi/m_3 \times 10_6$) Minimum	Average	Maximum
AMS-1B	195	517	855
AMS-2	11	71	247
AMS-3	3	190	650
AMS-4	0	21	61
AMS-5	0	20	61
AMS-6	5	55	140
AMS-7	0	33	146
AMS-8A	34	106	234
AMS-9B	0	131	323
A & W	9	22	45
CROSBY	<MDC	11	25
MORGAN	<MDC	9	29
ELDA	0	16	51
ELDA ROOF	0	19	37
MIAMITOWN	<MDC	12	27
CSTC	<MDC	9	32

Summary of 1996 Results - Uranium in Air

AMS Location	# of Samples	Uranium concentration ($pCi/m_3 \times 10_6$) Minimum	Maximum	Average
AMS-1A	16	40	2242	313
AMS-1B	12	159	2871	865
AMS-2	27	0	939	103
AMS-3	27	5.3	715	165
AMS-4	27	5.3	415	63
AMS-5	27	5.4	370	73
AMS-6	27	2.7	505	91
AMS-7	27	<MDC	197	23
AMS-8	7	32.7	451	152
AMS-8A	11	12.8	898	307
AMS-9A	7	51.4	531	260
AMS-9B	11	15.5	784	314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11/12/96
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05/13/97
Date
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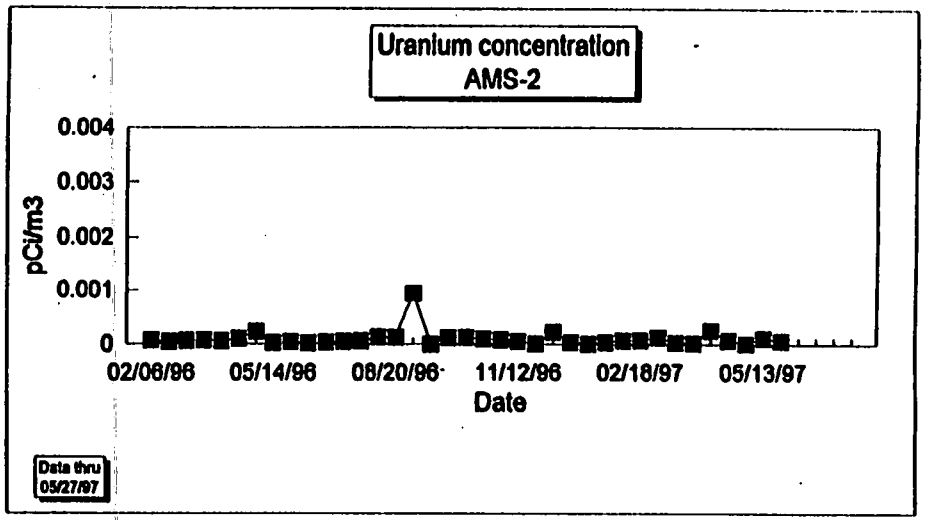
Data thru
05/27/97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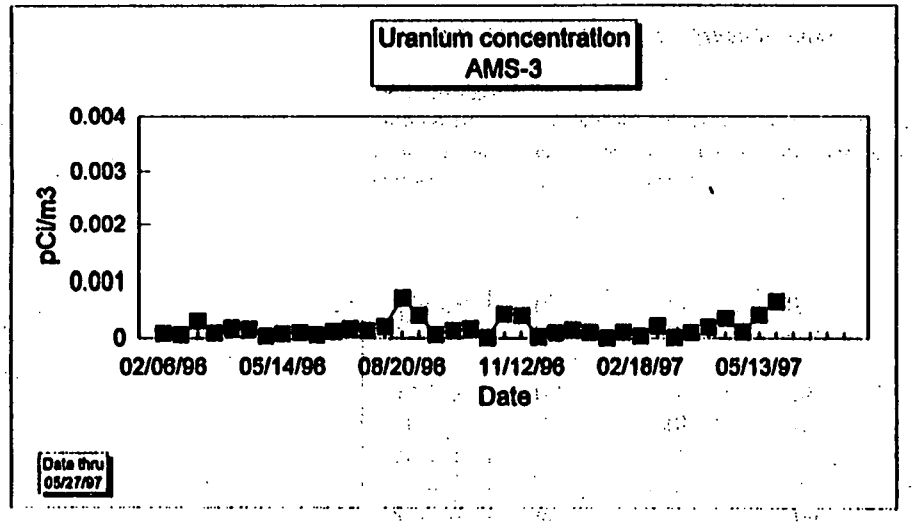
Date
Data thru
05/27/97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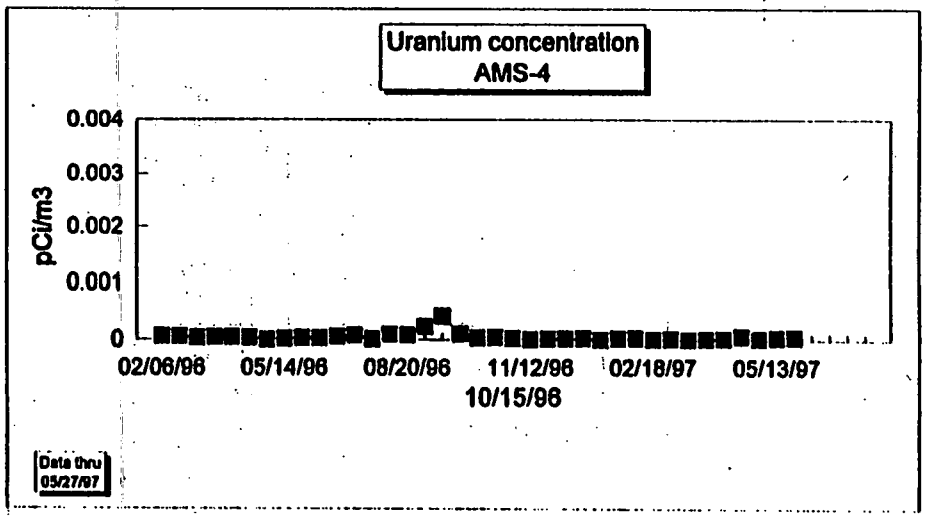
Date
Data thru
05/27/97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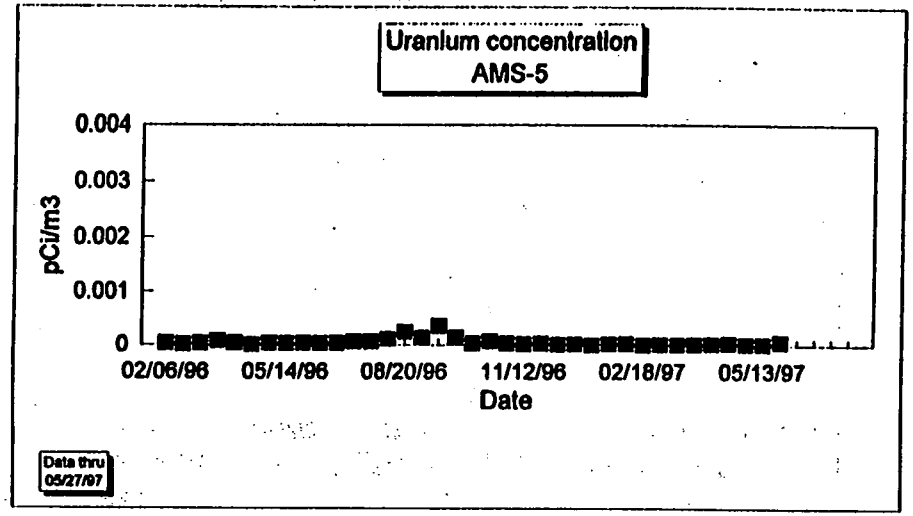
10/15/96
Data thru
05/27/97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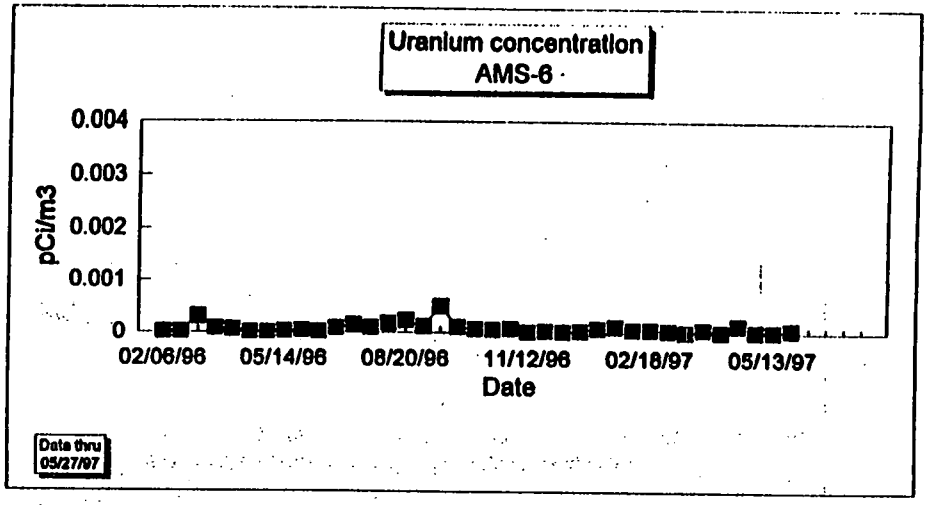
05/13/97
Date
Data thru
05/27/97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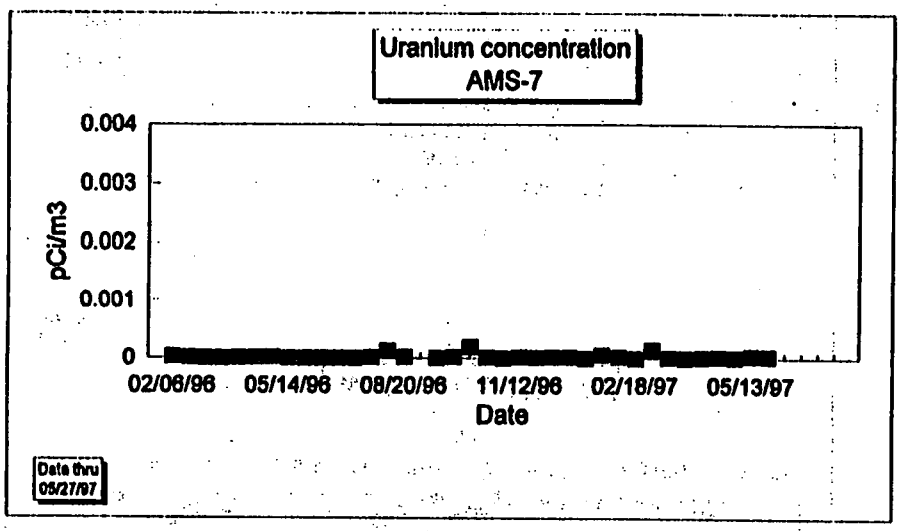
Date
Data thru
05/27/97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Date
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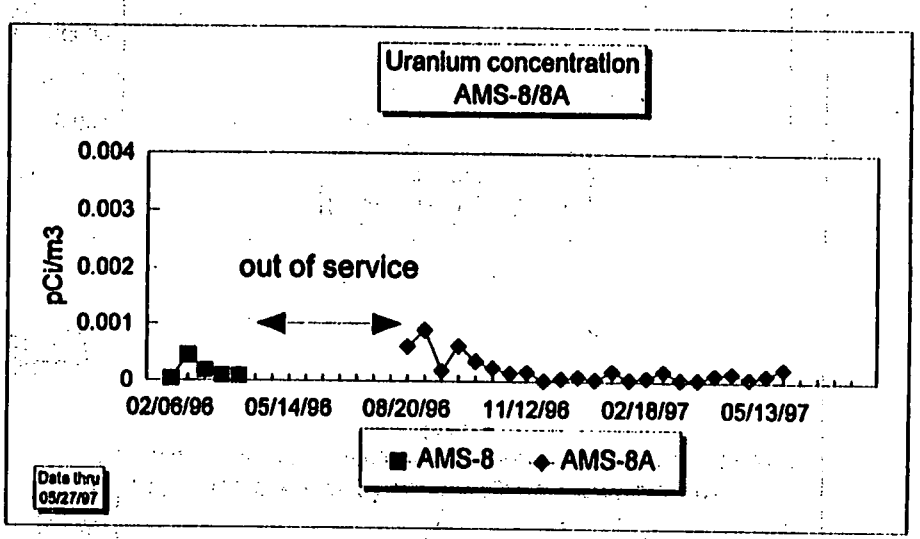
05/27/97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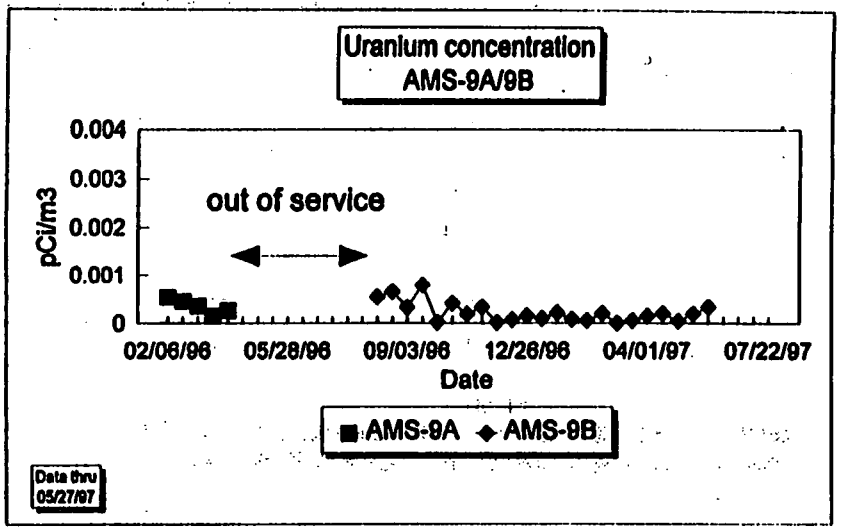
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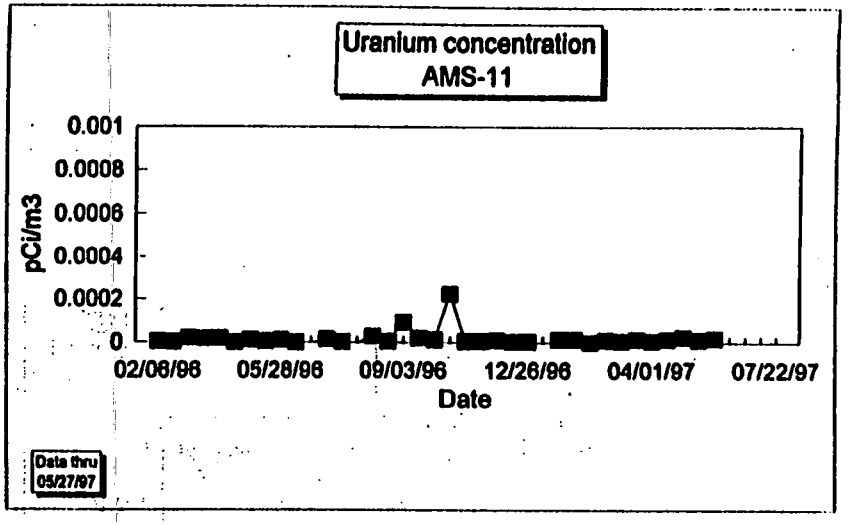
05/27/97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Data thru
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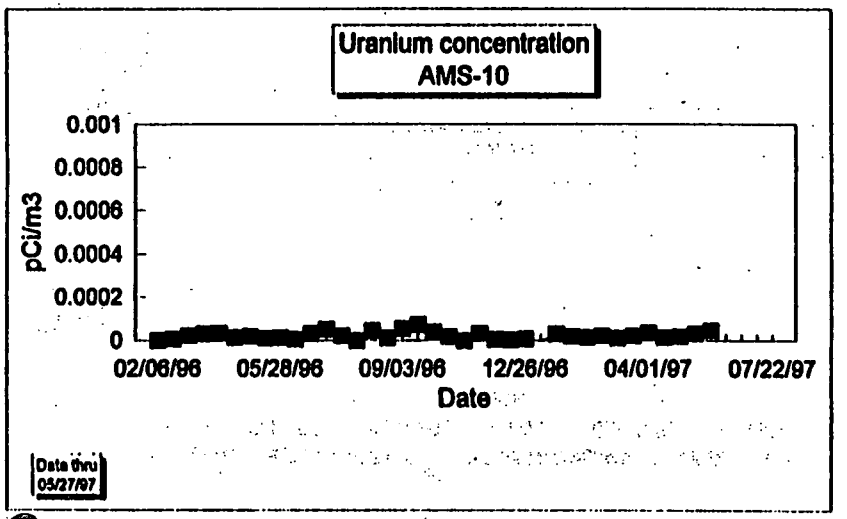
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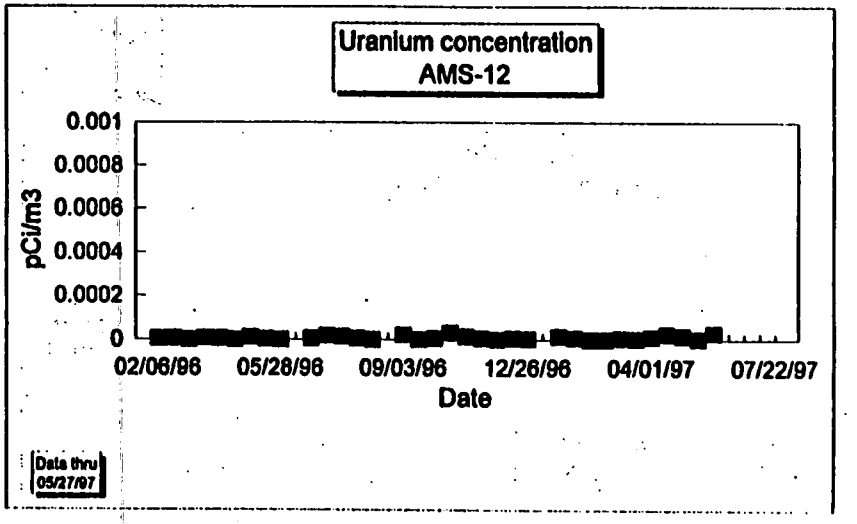
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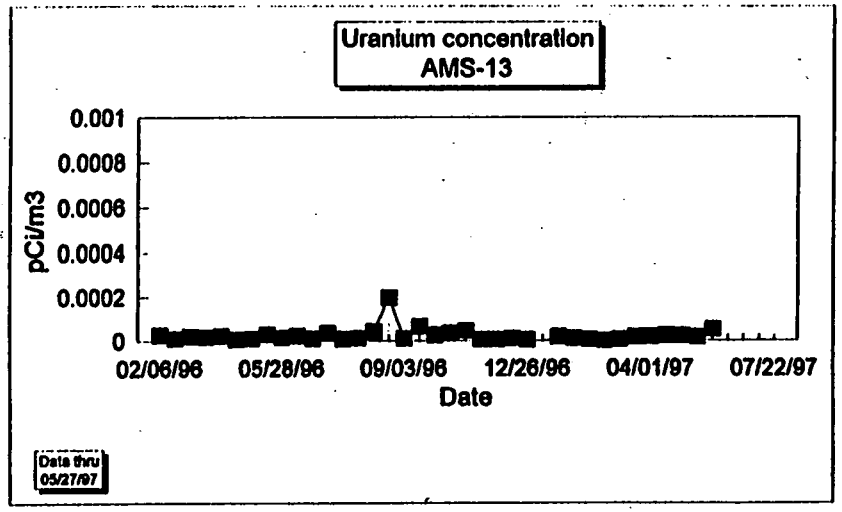
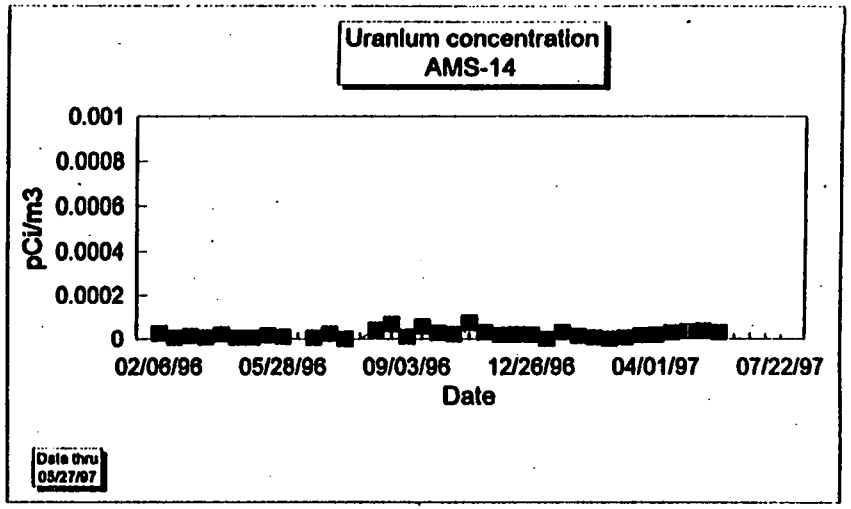
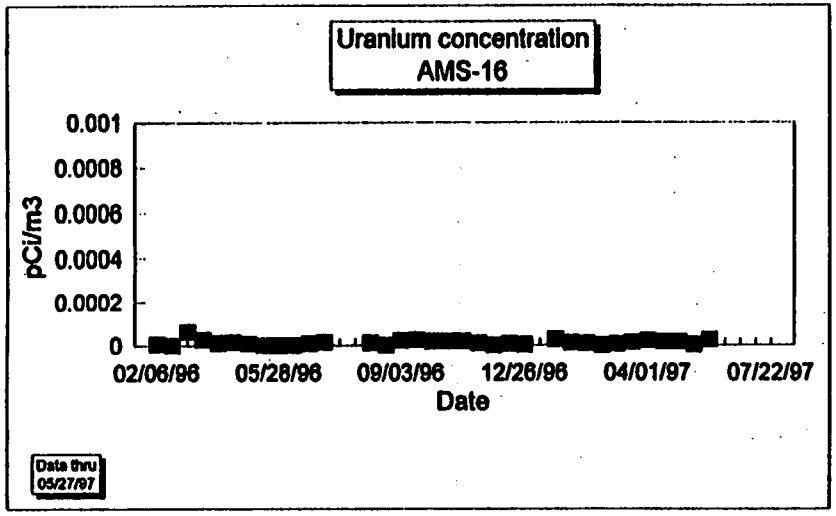
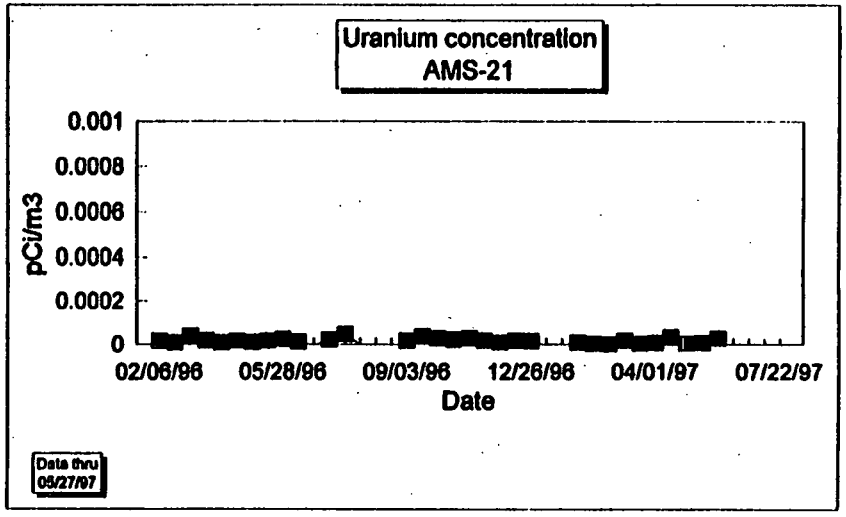
07/22/97
Date
Data thru
05/27/97









Attachment C

PLANT 1 DISMANTLING - DECONTAMINATION WATER SAMPLING PLAN

AND

DECONTAMINATION WATER SAMPLING RESULTS

PROJECT SPECIFIC PLAN

FOR

PLANT 1 DISMANTLING - DECONTAMINATION WATER SAMPLING
RI/FS WBS 04.116

REVISION 0

March 22, 1996

UNCONTROLLED

Prepared by

Fernald Environmental Restoration Management Corporation

Prepared for

U.S. Department of Energy
Fernald Field Office

Under Contract DE-AC05-92OR21972

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

PROJECT SPECIFIC PLAN
PLANT 1 DISMANTLING - DECONTAMINATION WATER SAMPLING
RI/FS WBS 04.116, REVISION 0
MARCH 22, 1996

APPROVAL:

Lorie Miller 4/2/96

Lorie Miller, Remediation Planning Manager — Date
Facilities D&D Project

Reinhard Friske 4-2-96

Reinhard Friske, Project Manager — Date
Performance/Quality Assurance

Catherine M. Frazer for Karen Voisard 4-3-96

Karen Voisard, Manager — Date
Environmental Programs Development

1.0 INTRODUCTION

1.1 PURPOSE

This Project Specific Plan (PSP) describes the field sampling activities to be performed by Environmental Technical Services (ETS) Division, Environmental Field Operations (EFO) section field personnel. This PSP also identifies analyses to be performed by Fernald Environmental Management Project (FEMP) and contract laboratories. Sampling and analysis shall be consistent with the SCQ and DQO WW-015, Revision 0 (Appendix A).

The final "Operable Unit 3 Remedial Design/Remedial Action (RD/RA) Work Plan for Interim Remedial Action," March 1995, and the final "Operable Unit 3 Plant 1 Complex - Phase I Implementation Plan for Above-Grade Decontamination and Dismantlement," March 1996, outlines the strategy for decontaminating and dismantling activities at the Plant 1 Complex (which includes buildings 1A, 1B, 30B, 56B, 56C, 66, 67, and 72). Such planned activities will generate large volumes of waste water resulting from the cleaning and decontamination of various equipment to be removed from the Plant 1 Complex.

1.2 SITE DESCRIPTION

Plant 1 is the former Sampling Plant where incoming ore was sampled, recycled materials stored, enriched uranium-contaminated slag ground for processing, and drums reconditioned. The Plant 1 Complex is located northwest of the intersection of 2nd and B Streets in the former process area. Babcock & Wilcox/Nuclear Environment Services, Inc. shall conduct decontamination and dismantlement activities for the Plant 1 Complex. Waste water generated during these activities shall be temporarily stored in tanks outside Plant 1 (see Figure 1).

1.3 SCOPE

The decontamination waste water shall be sampled one tank at a time. One sample shall be collected from the tanks as the tanks are filled to characterize the waste water for discharge into the FEMP Wastewater Treatment System. An expected total of two decontamination waste water sampling events (samples collected from two tanks) shall be conducted. Following receipt of the analytical results, additional samples may be collected at the discretion of the Facilities Decontamination and Dismantlement Project (FDDP) Project Engineer. The samples shall be analyzed for the parameters listed in Table 1-1.

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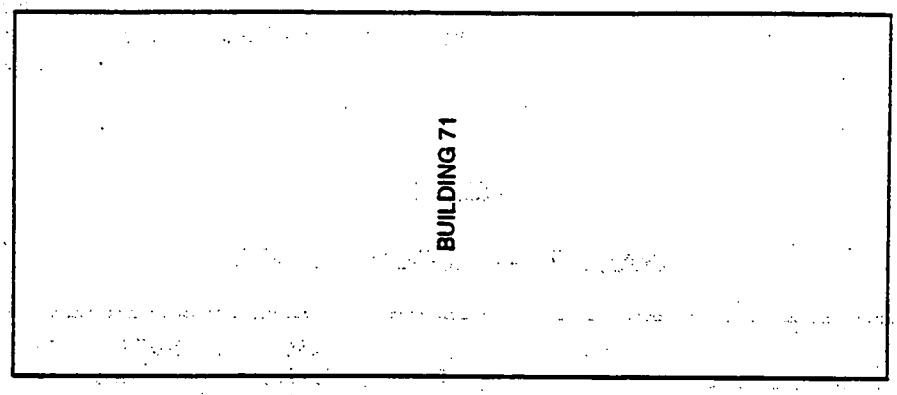

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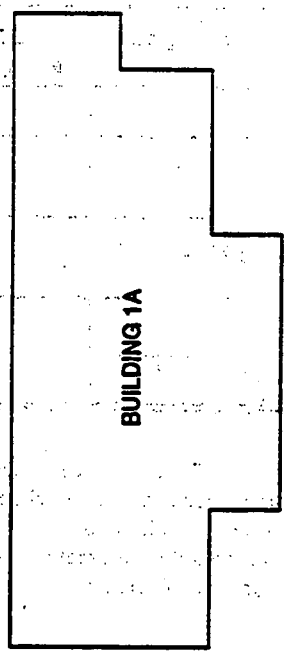

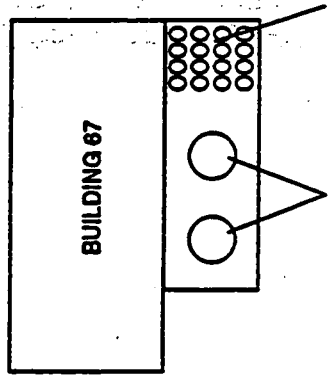

N

FIGURE 1
TEMPORARY STORAGE TANK LOCATION, PLANT 1

TABLE 1-1

ANALYTICAL REQUIREMENTS

ANALYSIS	CONTAINER	NO. X VOL.	LAB	ASL LEVEL	HOLDING TIMES (days)	PRESERVATIVE
Total RCRA Volatiles*	amber glass	3 X 40 ml teflon lined cap	On-Site	B	14	Cool to 4° C HNO_3 to pH < 2
PCB's**	amber glass	2 X 1 L teflon lined cap	Off-Site	B	7	Cool to 4° C
A\B Screen	glass	1 X 250 ml	On-Site	B	180	None
Total Metals***	poly	1 X 1 L	On-Site	B	180/28 Hg	HNO_3 to pH < 2
Thorium 230	glass or poly	1 X 1 L	On-Site	B	180	HNO_3 to pH < 2
Uranium 235	glass or poly	1 X 4 oz	On-Site	B	180	HNO_3 to pH < 2
Total Uranium						

* Total RCRA Volatiles include: benzene, carbon tetrachloride, chlorobenzene, chloroform, 1,2-dichloroethane, 1,1-dichloroethylene, methyl ethyl ketone, tetrachloroethylene, trichloroethylene, and vinyl chloride.

** PCB's include: Aroclors 1016, 1221, 1232, 1242, 1248, 1254, and 1260.

*** Total Metals include: Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Selenium, Silver, and Zinc.

2.0 RESPONSIBILITIES

Key project personnel to the performance of this project from the following groups are listed below: FDDP, Construction, Environmental Programs Development (EPD), EFO, and Performance/Quality Assurance (P/QA).

TABLE 2-1

KEY PROJECT PERSONNEL

TITLE	PRIMARY	ALTERNATE
Project Engineer, FDDP	Lyle Hampshire	Mike Heinen
Construction	Mike Stevens	David Balzen
Project Coordinator, EPD	Ken Geiger	Thea Layne
Manager, EFO	Mike Frank	Lawrence Love
Field Supervisor, EFO	NA	Lawrence Love
Project Manager, P/QA	Reinhard Friske	Harold Swiger
Project Contact, ACS	Jenny Vance	Lee Ann Stroud

3.0 SAMPLING PROGRAM

Babcock & Wilcox/Nuclear Environmental Services Inc. shall conduct dismantling and decontamination operations inside Plant 1 and pump waste water into temporary storage tanks. The temporary storage tanks shall be utilized for containment of the decontamination waste water and provide 15 calendar days storage capacity between sampling events.

EFO Sampling Technicians shall collect waste water samples in accordance with Standard Operating Procedure EP-SMS-009, "Sediment/Sludge Sampling," Section 6.7.1 through Section 6.7.6.C, "Sediment/Sludge Sampling with a Sludge Judge." The Sludge Judge shall be lowered to the bottom of the tank and the samples shall be collected from the entire height of the tank contents. The contents of the Sludge Judge will be transferred to a clean one-gallon container to facilitate the filling of sample containers. The total volatiles shall be collected separately from the top of the tank using a bailer or Sludge Judge to transfer the water directly to the volatile organic compound containers. One additional 120 mL container of waste water shall be collected in a glass container and measured for pH using a Horiba Water Quality Meter; the pH measurement shall be recorded on the Sample Collection Log, FS-F-3714. The water for pH measurement shall then be returned to the tank from which it was collected.

The EFO Sampling Technicians shall document the presence of suspended solids or tank bottoms on the Field Activity Log (FAL), FS-F-3682.

4.0 QUALITY ASSURANCE/QUALITY CONTROL REQUIREMENTS

EFO sampling events follow Quality Assurance/Quality Control (QA/QC) protocol established in Section 4 and Appendix K of the SCQ.

4.1 PROJECT REQUIREMENTS FOR SELF-ASSESSMENTS, SURVEILLANCES

Self-assessment and independent assessments of work processes and operations shall be undertaken to assure quality of performance. Self-assessment shall be performed by the ETS Division, shall encompass technical and procedure requirements, and may be conducted at any point in the project.

Independent assessment shall be performed by the FEMP QA organization by conducting surveillances. As a minimum, one surveillance shall be conducted, consisting of monitoring/observing on-going project activity and work areas to verify conformance to specified requirements. Surveillances shall be planned and documented in accordance with Section 12.3 of the SCQ.

4.2 FIELD CHANGES TO THE PROJECT SPECIFIC PLAN

Prior to the implementation of field changes, the EPD Project Coordinator and EFO Manager or EFO Supervisor shall be informed of the proposed field changes and the circumstances requiring them. Once the EPD Project Manager has obtained approval (verbal or written) from the FDDP Project Engineer and QA representative for the field changes to the PSP, the field changes may be implemented. Field changes to the PSP shall be noted in the FAL and on a Variance Request form. QA must receive the completed Variance Request, which includes the minimum signatures of the FDDP Project Engineer, the requestor, and QA, within one week of the granting of the verbal approval.

5.0 EQUIPMENT DECONTAMINATION

Disposable equipment shall be used to collect the samples; therefore, no decontamination is required. In the event that a piece of reusable equipment is suspected of having become contaminated, and as a precaution to protect worker safety and health, any such items shall be isolated and decontaminated in accordance with Level II Decontamination, Section K.11 of the SCQ and as described in the Standard Operating Procedure EP-SMS-003, "Equipment Decontamination."

The Horiba Probe shall be decontaminated using a Level II procedure followed by a radiological survey for removable and fixed radiological contamination. If the survey indicates contamination, the EFO Sampling Technicians shall perform a Level III Decontamination, Section K.11 of the SCQ, until the radiological survey is below free release limits.

6.0 HEALTH & SAFETY

EFO Sampling Technicians shall conform to precautionary surveys performed by the personnel representing Industrial Hygiene and Radiological Control. Concurrence to applicable safety permits (indicated by the signature of each EFO Sampling Technician assigned to this project) is expected by EFO Sampling Technicians in the performance of their assigned duties.

The EFO Lead Sampling Technician shall insure that each EFO Sampling Technician performing sampling related to this project has read the applicable permits, the Plant 1 D&D Project Specific Health and Safety Plan, and the Job Safety Analysis (Appendix B) to protect worker safety and health. EFO Sampling Technicians who do not sign the applicable health and safety survey forms shall not participate in the execution of sampling activities related to the completion of assigned project responsibilities. A copy of applicable safety permits/surveys issued for worker safety and health shall be posted at the exclusion zone boundary of the sample location and, at the completion of the project, the completed forms shall be submitted for incorporation into the project files.

7.0 DISPOSITION OF SAMPLING-GENERATED WASTES

During completion of sampling activities, EFO Sampling Technicians may generate contact wastes. Following completion of sampling, the EFO Sampling Technicians shall place contact wastes into properly labeled bags and disposition in accordance with appropriate FEMP waste management policies.

Any excess unpreserved sample shall be returned to the tank from which it was collected. All decontamination water shall be containerized and transported to Plant 8 or the General Sump for any necessary treatment and disposition.

8.0 DATA MANAGEMENT PLAN

This data management plan will be implemented so information collected during the investigation will be properly managed following completion of the field activities. As specified in Section 5.1 of the SCQ, sampling teams shall describe daily activities on the FAL sufficient for the sampling team to reconstruct a particular situation without reliance on memory. Sample Collection Logs shall be completed according to EFO instructions specified in Sample Collection Log, FS-F-3714 (Completion Instructions).

8.1 VERIFICATION

To assure proper documentation was completed during field activities and that documentation was completed correctly, field documentation shall be validated by EFO. Analytical data shall be verified by the FDDP Project Engineer.

8.2 DATA ENTRY

Analytical data shall be entered into the FEMP Fernald Analytical Computerized Tracking System (FACTS) and transferred into the Site-Wide Environmental Database (SED) by Analytical Data Management and Data Systems Management. Manual, double keyed, data entry shall be performed and the entered data shall be compared to the original data sheets; corrections shall be initialed and data, and made as necessary. Hard-copy documents are kept in permanent storage in the project files and the electronic database is permanently archived in a neutral ASCII file format.

8.3 DATA DISSEMINATION

The Project Engineer will be responsible for assembling and reporting the data to Construction, Babcock & Wilcox, and any other groups, as necessary, so that the stored water can be disposed of in a timely manner.

APPENDIX A

DATA QUALITY OBJECTIVE

NOTE: This copy of the DQO is an uncontrolled document.
Verify current revision is being used prior to implementation.

Fernald Environmental Management Project

Data Quality Objectives

Title: Disposition of OU 3 Remedial Action Decontamination Waste Water - Plant 1

Number: WW-015

Revision: 1

UNCONTROLLED

Effective Date: April 8, 1996

Contact Name: Ken Geiger

Approval: Lorie Miller **Date:** 4/9/96
Project Manager

Approval: Williams O. Kelley **Date:** 4-8-96
DQO Coordinator

Rev. #	1				
Date	04/08/96				

DATA QUALITY OBJECTIVE

Disposition of OU3 Remedial Action Decontamination Waste Water

1. Problem Statement

Planned decontaminating, decommissioning and dismantling activities of former processing p buildings within Operable Unit 3 (OU 3) will generate large quantities of waste water resulting f the washing and decontamination of various parts and appurtenances in the buildings. The iden and amounts of hazardous or controlled constituents in decontamination waste water must determined to maintain proper handling and system control. Waste water analyses must be comple in a timely manner in order to protect the environment and ensure timely processing.

Characterization of waste is required under the Resource Conservation and Recovery Act (RCRA promulgated in 40 CFR 261 and Ohio Administrative Code 3745. RCRA must be followed as Applicable, Relevant, or Appropriate Requirement (ARAR) to the Comprehensive Environme Response, Compensation, and Liability Act (CERCLA) process at the Fernald Environme Management Project (FEMP).

Sampled waste waters from the decontamination of FEMP OU 3 Decontamination and Decommiss (D&D) complexes are anticipated to contain suspected contaminants of concern (as listed in the 3 Interim Remedial Design/Remedial Action (RD/RA) Work Plan and in the OU 3 complex-spec Implementation Plans. Clean Water Act/SEC. 402 [33 U.S.C. 1342] and 40 CFR 122 National Pollut Discharge Elimination System (CWA and NPDES) discharge limits and treatment efficiency monitori in addition to treatment facility process controls, provide the regulatory drivers beyond the scope the RCRA and RD/RA requirements noted above.

The specific problem to be addressed by this Data Quality Objective is to confirm the presence a amounts of hazardous or controlled constituents in decontamination waste water, based on proc knowledge. The logic continues with a comparison of the amounts of these constituents with limits established in the RCRA/CWA/NPDES permitting regulations, and established process contr defining acceptable constituent levels for the Plant 8 VOC Treatment Sump and the Advanced Wa Water Treatment facility (AWWT). If the concentration of any hazardous or controlled contamina of concern (COCs) from a waste water sample of a given temporary storage tank exceeds the lim published in the above mentioned regulations or limits established for the treatment facility, material is considered hazardous or controlled waste.

*NOTE: THIS DQO DOES **NOT** PERTAIN TO DRUM SAMPLING.*

2. Identification of a Decision that Addresses the Problem

The major decisions that must be resolved in this DQO are:

1. Does the decontamination waste water contain hazardous or controlled waste and what are hazardous or controlled waste constituents of concern?

In order to determine whether or not the decontamination waste water is hazardous or control waste, process knowledge will be utilized to confirm the process function of the unit. If the mate within the unit cannot be fully characterized using process knowledge, samples will be taken a analyzed to confirm the identity and/or to determine if the material is a hazardous or controlled was A full list of suspected contaminants of concern is shown in the OU 3 Interim RD/RA Work Plan a

in the OU 3 complex-specific Implementation Plans. Sampling and laboratory analysis will determine the presence/absence and amounts/concentrations of such suspected contaminants of concern.

2. Do analytical results provide ample data to determine compliance with the NPDES Permit ?

Upstream waste water sampling will be conducted to determine the measurable amounts of contaminants/levels of pollutant concentrations to be introduced into the Plant 8 Sump and the AWWT to monitor said treatment facilities efficiency.

3. Identification of Inputs that Affect the Decision

The inputs (analytical sampling) needed to effect the decisions listed above will be based on process knowledge (to include any previous waste characterization sampling from SWIFTS or SED). The decontamination waste water samples will be analyzed, based on process knowledge, for the contaminants of concern for Plant 1 as listed in the OU 3 Interim RD/RA Work Plan and in the OU 3 complex-specific Implementation Plans.

Based on this knowledge the specific contaminates of concern include: metals (antimony, arsenic, beryllium, cadmium, chromium, copper, barium, lead, mercury, nickel, selenium, silver, and zinc), PCB's (Arochlors 1016, 1221, 1232, 1242, 1248, 1254, and 1260), Thorium-230, Total Uranium and weight % U-235, and Total Volatiles.

The materials to be sampled are all liquid materials that are water-based mixtures that may contain some product and metals. Note that all decontamination washwaters are run through both 20 and 5 micron filters prior to accumulation in the temporary storage tanks where they will be held until analytical data verifies the chemistry. The filter media will be disposed of separately and is not a factor influencing treatment by Plant 8 or the AWWT. Liquids can be further broken down into waters containing acid, organics (chlorinated solvents, petroleum or related product, etc.) or an unknown liquid. Any of these three liquid categories can contain little or no percentage of suspended particles or solids after filtration.

4. Specification of the Domain of the Decision

Spatial boundary: the spatial boundaries are to be distinctly specified as a bermed area surrounding (typically) four 6,500 Gallon Plastic Tanks used as holding tanks for the decontamination water. These are currently located outside of Plant 1.

Temporal boundaries will depend upon the level of decontamination and dismantling activities taking place. Since the tanks are located outside, the collection of decontamination waste water will be weather dependent. Additionally, the timing of sample delivery will be essential if holding times are to be met.

5. Development of Logic Statements

1. Characteristic Hazardous Waste (potentially applicable characteristics)

If the concentration of the contaminants of concern in the decontamination waste water sample is above the regulatory limits as specified in 40 CFR 261.24, then the substance is characterized hazardous for toxicity.

If an aqueous solution has a pH of less than or equal to 2 or greater than or equal to 12.5, then the substance is characterized hazardous for corrosivity.

If a substance has been classified as characteristically hazardous for reactivity, then a represent sample of the waste has at least one of the properties discussed in 40 CFR 261.23.

2. Controlled Effluent Wastes

If the concentration of the contaminants of concern in the decontamination waste water samp above the regulatory limits in 40 CFR 122 (as specified in the site-specific NPDES permit and rene then the facility owner must document and report such concentrations in a timely and forth manner. A NPDES "notification level" of One hundred micrograms per liter (100 μg/l) is gene considered to be the acceptance limit for the Plant 8 Sump (of any one metallic analyte). How the acceptance limit of any analyte must be determined in relation to the volume of water gener (the mass loading) in order to make the final decision on acceptance criteria. Intake process co provides some of the information required for NPDES permit compliance and renewal.

3. Listed Hazardous Wastes

The listing of hazardous wastes is specified in 40 CFR 261.31 through 40 CFR 261.33.

6. **Establish Constraints of Uncertainty**

A false negative error would occur when analytical results do not confirm the presence of hazar or controlled waste, rejecting process knowledge claims that there was hazardous or controlled wa when in actuality, the material does exhibit hazardous or controlled waste characteristics or cor a listed hazardous waste. The consequence of this type of error would be to treat the material as hazardous (or non-controlled), rather than hazardous (or controlled). This error has possible health political consequences, as well as economic and social.

False positive error would occur when the analytical results of the decontamination waste w sampling were incorrectly identified as exceeding the characteristics described in Section 5 (or b a listed hazardous waste), showing that the material contained hazardous or controlled waste needed to be treated as such when in fact no such treatment was needed. The consequence of type of error would be to increase both the processing time and the expenses associated with e treatment, storage and/or disposal of large volumes of this material. The major consequence w be economic with political and social consequences being secondary.

The major concern for this DQO would be the false negative errors. These errors can be assesse lab matrix spike analyses.

7. **Development of a Cost-Effective Design for Obtaining Data**

In order to obtain a representative sample, a visual inspection of the temporary storage tank cont may be required. Examples of sampling techniques used for expected homogenous and heterogen liquids would be grab and Sludge Judge samplers respectively. Multiple samples may be colle depending on the heterogeneity of the material per the guidelines of the SCQ. The analyte lists be reduced or expanded based on process knowledge or preliminary waste water laboratory anal

In some instances, percent composition and/or acid-base normality will be performed in orde confirm if the identity of the waste water material is consistent with process knowledge claims.

Holding times for raw and product materials may differ from the listed SCQ holding times environmental samples. Holding times and preservation techniques will be chosen to insure

integrity of the samples and appropriate cost benefits. Variations from the SCQ holding times will be described in the individual Project Specific Plan (PSP).

Analytical methods and performance criteria will be as indicated in Appendix G of the SCQ.

8. Summary of DQO Logic Flow

Samples are collected as per Appendix A of the SCQ. Specific requirements will be specified in the PSP. Only certified sampling containers shall be used, eliminating the need for a container blank. Performance evaluation samples will be provided by the QC department, as needed.

Field monitors such as Photoionization Detectors (PIDs), X-ray Fluorescence (XRF) and Flame Ionization Detectors (FIDs) used to support process knowledge claims will use Analytical Support Level (ASL) A. For the majority of the sampling program though, ASL B (SW-846 methods, Vol. II) is required. The radiological samples will also be collected at ASL B.

The data obtained will be use by the Project Engineer who will inform the appropriate personnel in Plant 8 and the AWWT of the sampling results.

To assure appropriate documentation was completed during field activities and that documentation was completed correctly, field documentation shall be validated by Environmental Field Operations. Analytical data shall be verified by the CRU3 Project Engineer. Hard-copy documents will be kept in permanent storage in the Project Files.

1.A. Task/Description: OU #: 3

Decontamination Waste water Sampling

1.B. Project Phase: (Put an X in the appropriate box.)

RI ☐ FS ☐ RD ☒ RA ☒ OTHER ☐ Specify: _____

1.C. DQO No.: WW-015 DQO Reference No.: _____

---

2. Media Characterization: (Put an X to the right of the appropriate box.)

Air ☐ Biological ☐ Groundwater ☐ Sediment ☐ Soil ☐

Waste ☐ Waste water ☒ Surface water ☐ Other (specify)

---

3. Data Use with Analytical Support Level (A-E): (Put an X in the appropriate box. Analytical Supp Level {ASL} selection(s) should be marked to the right of each applicable Data Use.)

Site Characterization
A ☐ B ☐ C ☐ D ☐ E ☐

Risk Assessment
A ☐ B ☐ C ☐ D ☐ E ☐

Evaluation of Alternatives
A ☐ B ☐ C ☐ D ☐ E ☐

Engineering Design
A ☐ B ☐ C ☐ D ☐ E ☐

Monitoring during remediation activities
A ☐ B ☐ C ☐ D ☐ E ☐

Other (Explain) Waste Characterization
A ☒ B ☒ C ☐ D ☐ E ☐

4.A. Drivers: **CERCLA Amended Consent Decree, Resource Conservation and Recovery Act, C Administrative Code 3745.51; 40 CFR 261.23 and 261.24, Clean Water Act (SEC. 402 [33 U.S 1342]), 40 CFR 261.31 through 40 CFR 261.33, and 40 CFR 122, the National Pollutant Discha Elimination System.**

4.B. Objective: **To show, through the use of decontamination waste water sampling, the presence hazardous or controlled waste.**

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5. Site Information (Description): **Operable Unit 3 (OU3) Plants and buildings are located in the for production area at the Fernald Environmental Restoration Project. It incorporates all above- and belo grade improvements, including, but not limited to, the facility structure, equipment, utilities, tan waste waters, product, and effluent lines.**

6.A. Data Types with appropriate Analytical Support Level Equipment Selection and SCQ Reference: (Put an X in the appropriate box or boxes selecting the type of analysis or analyses required. Then select the type of equipment to perform the analysis if appropriate. Please include a reference to the SCQ Section.)

1.	pH	☒	2. Uranium	☒	3. BTEX	☐
	Temperature	☐	Full Radiologic	☐	TPH	☐
	Specific Conductance	☐	Metals	☒	Oil/Grease	☐
	Dissolved Oxygen	☐	Cyanide	☐		
	Silica	☐				
4.	Cations	☐	5. VOA	☒	6. Other (specify)	☒
	Anions	☐	ABN	☐	Thorium-230	
	TOC	☐	Pesticides	☐	Total Thorium	
	TCLP	☐	PCB	☒		
	CEC	☐	COD	☐		

6.B. Equipment Selection and SCQ Reference:

Equipment Selection		Refer to SCQ Section	
ASL A	XRF, PID, FID, etc.	SCQ Section:	K
ASL B	Per SCQ	SCQ Section:	G
ASL C		SCQ Section:	
ASL D		SCQ Section:	
ASL E		SCQ Section:	

7.A. Sampling Methods: (Put an X in the appropriate selections.)

Biased ☐ Composite ☒ Environmental ☐ Grab ☒ Grid ☐

Intrusive ☐ Non-Intrusive ☐ Phased ☐ Source ☐

Other (specify):

DQO Number: WW-015

7.B. Sample Work Plan Reference: (List the samples required. Reference the work plan or sampling plan guiding the sampling activity, as appropriate.)

Background samples: Individual projects will have a PSP or similar approved sampling plan outl all sampling to be performed.

7.C. Sample Collection Reference: (Please provide a specific reference to the SCQ Section and subse guiding sampling collection procedures.)

Sample Collection Reference: SCQ Appendix K, Section K.5.5 and EPA SW-846,Chapter 9.

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8. Quality Assurance/Control Samples: (Place an "X" to the right of the appropriate selection(s).)

8.A. Field Quality Assurance Samples:

Trip Blanks	☐	Container Blanks	☐
Field Blanks	☐	Duplicate Samples	☐
Equipment Rinsate Samples	☐	Split Samples	☐
Preservative Blanks	☐	Performance Evaluation Samples	☐

Other (specify) _____ Refer to the sampling plan for additional QA samples, if requested

8.B. Laboratory Quality Control Samples:

Method Blank	☒	Matrix Duplicate/Replicate	☐
Matrix Spike	☒	Surrogate Spikes	☐
Other (specify)			

9. Other: Please provide any other germane information that may impact the data quality or gatherin this particular objective, task or data use.

Analyte lists may be reduced or expanded based on process knowledge or previous analytical resu Lists are expected to be typical requirements. Coordination with waste compliance and treatm facility personnel will ensure NPDES compliance.

APPENDIX B

JOB SAFETY ANALYSIS

JSA:number to be assigned

JOB: Plant 1 Dismantling-Decontamination Water Sampling (WBS 04.116) and Enrichment Sampling (Sampling and Analysis Plan No. 96-1231)			DATE: 5-3-96 REV. 0
JOB TITLE: Environmental/Laboratory Technician	DEPARTMENT: Site Restoration Services		SECTION/GROUP: Environmental Field Operations
SUPERVISOR: Lawrence Love	ANALYSIS BY: Mike Frank	REVIEWED BY: John DeHo	APPROVED BY: Mike Davis

REQUIRED AND/OR RECOMMENDED PERSONAL PROTECTIVE EQUIPMENT: chemical goggles while in Exclusion Zone, safety glasses with rigid side shields, steel-toed boots, hard hat, water-resistant anti-c hood, water-resistant washable coveralls (2 pair required for Bldg. 67 decon. water), gauntlet nitrile gloves over blue nitrile liner gloves, leather palm gloves, rubber overshoes over water-resistant booties, full-face air purifying respirator (inside Plant 1 for Plant 1 decon. water), powered air purifying respirator (inside Plant 1 for Bldg. 67 decon. water), HEPA respirator cartridges, taped openings, full body harness and lanyard, GFCI if electrical pump is used

SEQUENCE OF BASIC JOB STEPS	POTENTIAL ACCIDENT OR HAZARD	RECOMMENDED SAFE JOB PROCEDURE
1. Preplan	1. General radiation, radiological/chemical contamination and/or exposure	1a. Ensure medical monitoring, dosimetry, bioassay, and training are current. Fecal sample required for sampling Bldg. 67 decon. water inside Plant 1 due to potential thorium exposure. 1b. Radiological Control Technician (RCT) shall provide intermittent coverage. Review RWP Nos. 96-03-G13-309 (3000 gallon tanks south of Plant 1), 96-2-G13-241 (150 gallon tanks of Plant 1 decon. water inside of Plant 1), and 96-013-G13-300 (150 gallon tanks of Bldg. 67 decon. water inside of Plant 1) as applicable, and sign them after briefing by RCT, review, sign, and date the Project-Specific Health and Safety Plan (HSP) for Plant 1 D&D. Review the PSP (WBS 04.116), Sampling and Analysis Plan (SAP) No. 96-1231, EFO Procedure No. EP-SMS-009 "Sediment/Sludge Sampling" (the media sampled on this job may meet the definition of a "sludge" per this procedure, however, we do not have the Total Suspended Solids (TSS) analytical results or process knowledge to verify that fact at this time). Review Work Permit Nos. 32200 (3000 gallon tanks south of Plant 1), 36040 (150 gallon tanks of Plant 1 decon. water inside of Plant 1), and 36039 (150 gallon tanks of Bldg. 67 decon. water inside of Plant 1) as applicable after briefing to same by Supervisor and/or Health and Safety Officer (HSO), and prior to performing any work. Complete all the information that documents your attendance of the briefing on the Briefing Record. Maintain the latest versions of the controlled, if applicable, or approved copies of all of the above documents at the Exclusion Zone (EZ). 1c. Establish an EZ around the work areas using yellow caution tape or equivalent (e.g., rad. rope that establishes a Contamination Area or other type of Radiological Area), per SPR 3-5 "Barricades" if a radiological boundary is not used, including hanging a completed yellow or red barricade tag at the EZ opening(s). Anyone entering the EZ while work is performed shall be briefed to all health and safety-related and work scope documents by the Supervisor and/or HSO. 1d. Maintain minimum time and maximum distance from radiation sources. Clean-up work areas during and after job. 1e. Keep a minimum of a 15-minute capacity, portable eyewash with drench hose, fire extinguisher, phone and radio, and spill/splash control materials within 100 feet and 10 seconds. 1f. Wear safety glasses with rigid side shields or chemical goggles, steel-toed boots, and hard hat throughout this JSA-408.

SEQUENCE OF BASIC JOB STEPS	POTENTIAL ACCIDENT OR HAZARD	RECOMMENDED SAFE JOB PROCEDURE
1. Preplan (contd.)	1. General radiation, radiological/chemical contamination and/or exposure (contd.)	1c. used, including hanging a completed yellow or red (contd.)barricade tag at the EZ opening(s). Anyone entering the EZ while work is performed shall be briefed to all health and safety-related and work scope documents by the Supervisor and/or HSO. 1d. Maintain minimum time, maximum distance, and shielding (as applicable) from radiation sources. Clean-up work areas during and after job. 1e. Keep a minimum of a 15-minute capacity, portable eyewash with drench hose, fire extinguisher, phone and radio, and spill/splash control materials within 100 feet and 10 seconds. 1f. Wear a minimum of safety glasses with rigid side shields or chemical goggles, steel-toed boots, and hard hat throughout this JSA-408.
2. Erect a ladder to access the manhole of the 3000-gallon and 150-gallon (if necessary) tanks	2a. Splashes and spills of tank contents causing potential radiological and/or chemical contamination/exposure 2b. Contusions and/or lacerations from pinchpoints 2c. Slips and trips 2d. Falls of personnel and/or objects	2a. Place yellow herculite down on ground inside the EZ to cover all areas of potential splashes and spills. Wheel mobile carts, if applicable, onto herculite and set brakes on all wheels. Wear PPE and monitoring devices as specified on the applicable Work Permit and RWP. Survey splash areas on head and body immediately, and decontaminate if necessary per RCT's instructions. 2b. Wear leather palm gloves if a great amount of force is required or there are sharp edges nearby. Use sound ergonomics. 2c. Maintain a dry surface in the work area and on the bottoms of rubber overshoes. Walk your spaces, and be aware of your surroundings and capabilities. Minimize the equipment and materials in the work area, and clean-up continuously. 2d. Follow all applicable precautions listed in SPR 3-6 "Portable Ladder Use, Control, and Inspection". Inspect ladder before and after each use for bends, cracks (especially around rivet points of fiberglass ladders), loose or missing rivets, disconnected braces, corrosion, oil/chemical stains, etc. Erect on a solid and stable surface at the proper angle (base of ladder set 1/4 the length of ladder away from tank wall). Do not use a ladder outside when there are freezing rains, winds greater than 35 mph, thunder, or lightning. Ensure the 3000-gallon tank has enough media in it to support a ladder with a person on it. Use an extension ladder on the 3000-gallon tank with the two vertical rails extending a minimum of 3 feet above the top of the tank. Tie-off both vertical rails to the top of 3000-gallon tank if possible, and wear a full-body harness attached to a lanyard attached to the top horizontal rung of the extension ladder whenever standing 6 or more feet above ground. The spotter shall secure the non-slip feet at the base of the extension ladder with his feet, and hold the vertical rails with his hands while the ladder is in use.

SEQUENCE OF BASIC JOB STEPS	POTENTIAL ACCIDENT OR HAZARD	RECOMMENDED SAFE JOB PROCEDURE
3. Remove manhole cover, if present, from tank opening, and replace upon completion of sampling	3a. Reference 2a. 3b. Reference 2b. 3c. Reference 2c. 3d. Reference 2d.	3a. Reference 2a. Arrange for an IHT to monitor the tank opening before and after the manhole cover (if applicable) is removed from each tank until enough monitoring data is generated to justify to the IHT that such monitoring is no longer required. 3b. Reference 2b. Inspect any tools required to open manhole before and after each use. 3c. Reference 2c. 3d. Reference 2d.
4. Sample tank using a coliwasa, sludge judge, bailer, ladle with extended handle, Horiba Water Quality Meter, and/or electric pump, and transfer to sample containers	4a. Reference 2a. This applies to splashes and spills of sample containers too. 4b. Reference 2b. 4c. Reference 2c. 4d. Reference 2d. 4e. Electrical shock if electrical pump is used 4f. Splash/spill of chemical preservative, broken glass from a mishandled/dropped glass sample container or sample equipment	4a. Reference 2a. 4b. Reference 2b. 4c. Reference 2c. 4d. Reference 2d. 4e. Plug pump into a GFCI. 4f. Use a funnel if feasible. Contact the Emergency Medical System at X6511 when splashed if injured, flush any affected areas of the body splashed/contacted with preservative using a minimum of the portable eyewash with drench hose for a minimum of 15 minutes, and report to Medical. Clean-up and dispose of any broken glass and spills (if there is no imminent danger and you are trained to do so) immediately, or secure and evacuate the area. Report all spills to the AEDO via the Communication Center at X4444, and X6511 (if necessary).
5. Clean-up, doff PPE, survey, decontaminate, and label as required sample containers, materials, equipment, PPE, and personnel, and package/dispose of all wastes, as instructed by the RCT, permits, and procedures	5a. Reference 2a. and 4a. 5b. Reference 4f.	5a. Reference 2a. Survey the gauntlet nitrile gloves and decontaminate them if necessary prior to handling uncontaminated surfaces, per RCT's instructions. Return work areas to their original conditions or better. Perform a whole-body survey prior to exiting the EZ and/or Contamination Area or other Radiological Area, and head directly to the PCM at the Plant 1 Control Point. Reference Section 5.0 of the PSP for further instructions on decontaminating reusable equipment. Return any excess unpreserved sample media to the tank from which it was collected. Any liquids generated from decontamination of equipment or materials shall be containerized and transported to Plant 8 or the General Sump for treatment and disposition. 5b. Reference 4f.

VARIANCE / FIELD CHANGE NOTICE

V/F No. 04.116-1

WBS NO.:04.116

Page 1 of 1

PROJECT TITLE: Plant 1 Dismantling-Decontamination Water Sampling (Rev. 0)

Date: 4-16-96

VARIANCE / FIELD CHANGE NOTICE (Include justification):

Sample the water from Building 67 for the attached list of analytes prior to placement in the holding tanks identified in the PSP. The water to be sampled will be the second rinse water generated during the decontamination process. The water will be placed into 150 gallon tanks located outside of Building 67.
The sampling technique will be the same as that identified in the PSP including the field pH measurement.
"The change applies to DQO WW-015, Disposition of OU3 Remedial Action Decontamination Waste Water - Plant 1."

Justification

Building 67 is a Hazardous Waste Management Unit and will require the additional sampling before the water is released into the Plant 1 holding tanks.

REQUESTED BY: Mike Heinen Date: 4-16-96

X IF REQD	VARIANCE/FCN APPROVAL	DATE	X IF REQD	VARIANCE/FCN APPROVAL	DATE
	QUALITY ASSURANCE Rachael Tesla	4/17/96	X	PROJECT MANAGER Mike Heinen for Kay Hoff	4-17-96
	DATA QUALITY MANAGEMENT		X	FIELD MANAGER Mike Heinen	4-17-96
	ANALYTICAL CUSTOMER SUPPORT			OTHER	
	OTHER			OTHER	

VARIANCE/FCN APPROVED [ ]YES [ ]NO REVISION REQUIRED: [ ]YES [ ]NO

DISTRIBUTION

PROJECT MANAGER:	DOCUMENT CONTROL:	OTHER:
QUALITY ASSURANCE:	OTHER:	OTHER:
FIELD MANAGER:	OTHER:	OTHER:

ANALYTICAL REQUIREMENTS

ANALYSIS	CONTAINER	NO. X VOL.	LAB	ASL LEVEL	HOLDING TIMES (days)	PRESERVATIVE
Total Lead Total Chromium	plastic	1 X 1 L	On-Site	B	180	HNO_3 to pH < 2
Total Thorium	plastic/ glass	1 X 1 L	On-Site	B	180	HNO_3 to pH < 2

1167

VARIANCE / FIELD CHANGE NOTICE

V/F No 04.116-2

WBS NO.: 04.116

Page 1 of 1

PROJECT TITLE: Plant 1 Dismantling - Decontamination Water Sampling

Date: 5/1/96

VARIANCE / FIELD CHANGE NOTICE (Include justification):

Variance:

Collect a sample of rinse water from the floor of Building 67 for total lead, chromium, and total thorium. The D&D subcontractor will perform a final rinse of the floor and manually route the water to a basin area for sample collection. The collection basin will consist of a clean plastic liner material (e.g., Herculite) bermed on all sides with one side constructed as a ramp for receiving the rinse water.

A pH measurement will also be taken at the basin location. The change applies to DQO WW-015, Disposition of OU3 Remedial Action Decontamination Waste Water - Plant 1.

Justification :

Building 67 is a Hazardous Waste Management Unit and the rinse sample method is required to indirectly determine the presence or absence of contaminants of concern on the floor surface.

UNCONTROLLED

REQUESTED BY: Mike Heinen Date: 5/1/96

X IF REQD	VARIANCE/FCN APPROVAL	DATE	X IF REQD	VARIANCE/FCN APPROVAL	DATE
X	QUALITY ASSURANCE Faith A. Payne	5/3/96	X	PROJECT MANAGER	
	DATA QUALITY MANAGEMENT		X	FIELD MANAGER Mike Heinen	5-1-96
	ANALYTICAL CUSTOMER SUPPORT			OTHER	
	OTHER			OTHER	

VARIANCE/FCN APPROVED [X]YES [ ]NO

REVISION REQUIRED: [ ]YES [x]NO

DISTRIBUTION

PROJECT MANAGER:	DOCUMENT CONTROL: Michelle Tudor	OTHER:
QUALITY ASSURANCE:	OTHER:	OTHER:
FIELD MANAGER:	OTHER:	OTHER:

000078

ANALYTICAL REQUIREMENTS

ANALYSIS	CONTAINER	NO. X VOL.	LAB	ASL LEVEL	HOLDING TIMES (days)	PRESERVATIVE
Total Lead	plastic	1 X 1 L	On-Site	B	180	HNO_3 to pH < 2
Total Chromium						
Total Thorium	plastic/ glass	1 X 1 L	On-Site	B	180	HNO_3 to pH < 2

VARIANCE 04.116-1 HAS BEEN SUPERSEDED BY VARIANCE 04.116-2.

UNCONTROLLED

VARIANCE / FIELD CHANGE NOTICE	V/F No. 04.116-3
WBS NO.:04.116	Page 1 of 1
PROJECT TITLE: Plant 1 Dismantling-Decontamination Water Sampling	Date: 2/12/97

VARIANCE / FIELD CHANGE NOTICE (Include justification):

UNCONTROLLED

Field Change

A field change notice is requested to collect (1) water sample from Dempster Tank #01-728-TNK a portable water tank containing decontamination waste water generated as a result of the dismantling/decontamination of Plant 1. Tank #01-728-TNK is located at the corner of "A" Street & 2nd Street and to the south west of Plant 1. The requested sample will be collected as follows:

1). Establish an exclusion zone boundary around the tank (#01-728-TNK) selected for sampling.

2). Apply herculite and/or poly-vinyl sheeting beneath and around the area of the specified tank to be sampled;

a). Enclose the four sides of sheeting with appropriate spill control (absorbent socks or booms) to absorb and contain any possible spilled material.

b). Using a Sludge Judge sampler perform sampling of tank #01-728-TNK per PSP 04.116 and JSA #408 to collect approximately a 1 liter (poly-container) sample - preserve with HNO_3 to ph<2.

c). Alternative Sampling Procedure - using a peristaltic pump and appropriate tubing, lower an appropriate length of tubing to the bottom level of the tank and extract approximately 300 ml of liquid material and transfer extracted media into the selected 1 liter container. Repeat the same steps at the mid line tank depth and at the surface depth. After extracting a total 1 liter sample apply appropriate preservative and close container.

d. Dispose of any project derived waste according to PSP.

3. Submit sample for analysis of total Thorium at the onsite laboratory.

Justification

Two portable Dempster Tanks utilized for the transport of Plant 1 decontamination waste water from bulk storage tanks were scheduled for disposition through the Plant 8 General Sump. Due to several circumstances these tanks were not disposed of as planned. Because of the temporary shutdown of the General Sump, Plant 1 decontamination waste water will be disposed of through the Advanced Waste Water Treatment (AWWT) system. Previous analytical data generated through prior sampling of the Plant 1 bulk storage tanks revealed material that contained high Thorium content which raises a concern for disposition through the AWWT. Additional analysis to confirm re time activity of Thorium bearing material has been requested by project management prior to disposition.

REQUESTED BY: Lawrence Love Date: 2/12/97

X IF REQD	VARIANCE/FCN APPROVAL	DATE	X IF REQD	VARIANCE/FCN APPROVAL	DAT
X	QUALITY ASSURANCE	2/12/97	X	PROJECT MANAGER	2/12
	DATA QUALITY MANAGEMENT		X	FIELD MANAGER	2.12.9
	ANALYTICAL CUSTOMER SUPPORT			OTHER	
	OTHER			OTHER	

VARIANCE/FCN APPROVED [X]YES [ ]NO REVISION REQUIRED: [ ]YES [ ]NO

DISTRIBUTION

PROJECT MANAGER:	DOCUMENT CONTROL: Esther Dittmer	OTHER:
QUALITY ASSURANCE:	OTHER:	OTHER:
FIELD MANAGER:	OTHER:	OTHER:

E 12-JUN-97 SUMMARY REPORT PAGE 1
E 09:09:23

EASE NUMBER : 1000011362
JECT NAME : 96-1231 PLANT 1 ENRICHMENT SAMPLING

SAMPLE ID	USER SAMPLE ID	SAMPLE POINT	SUFFIX	COMPONENT	RESULT	UNITS	LQ	DATE SAMPLED	ASL
200236833	96-123-412057	1		URANIUM 235	0.999	APPROX. WT % (U		30-MAY-96	B
200236833	96-123-412057	1		URANIUM 235-LBC	YES	YES/NO		30-MAY-96	B
200236833	96-123-412057	1		URANIUM 235-LCE		2 sigma		30-MAY-96	B
200236833	96-123-412057	1		URANIUM 235-LMDC		APPROX. WT % (U		30-MAY-96	B
200236833	96-123-412057	1		URANIUM 235-LTPU		2 sigma		30-MAY-96	B
200236837	96-123-412058	2		URANIUM 235	1.06	APPROX. WT % (U		30-MAY-96	B
200236837	96-123-412058	2		URANIUM 235-LBC	YES	YES/NO		30-MAY-96	B
200236837	96-123-412058	2		URANIUM 235-LCE		2 sigma		30-MAY-96	B
200236837	96-123-412058	2		URANIUM 235-LMDC		APPROX. WT % (U		30-MAY-96	B
200236837	96-123-412058	2		URANIUM 235-LTPU		2 sigma		30-MAY-96	B
200236838	96-123-412059	3		URANIUM 235	1.04	APPROX. WT % (U		30-MAY-96	B
200236838	96-123-412059	3		URANIUM 235-LBC	YES	YES/NO		30-MAY-96	B
200236838	96-123-412059	3		URANIUM 235-LCE		2 sigma		30-MAY-96	B
200236838	96-123-412059	3		URANIUM 235-LMDC		APPROX. WT % (U		30-MAY-96	B
200236838	96-123-412059	3		URANIUM 235-LTPU		2 sigma		30-MAY-96	B
200236839	96-123-412060	4		URANIUM 235	1.02	APPROX. WT % (U		30-MAY-96	B
200236839	96-123-412060	4		URANIUM 235-LBC	YES	YES/NO		30-MAY-96	B
200236839	96-123-412060	4		URANIUM 235-LCE		2 sigma		30-MAY-96	B
200236839	96-123-412060	4		URANIUM 235-LMDC		APPROX. WT % (U		30-MAY-96	B
200236839	96-123-412060	4		URANIUM 235-LTPU		2 sigma		30-MAY-96	B
200236840	96-123-412061	5		URANIUM 235	1.03	APPROX. WT % (U		30-MAY-96	B
200236840	96-123-412061	5		URANIUM 235-LBC	YES	YES/NO		30-MAY-96	B
200236840	96-123-412061	5		URANIUM 235-LCE		2 sigma		30-MAY-96	B
200236840	96-123-412061	5		URANIUM 235-LMDC		APPROX. WT % (U		30-MAY-96	B
200236840	96-123-412061	5		URANIUM 235-LTPU		2 sigma		30-MAY-96	B
200236841	96-123-412062	21		URANIUM 235	0.999	APPROX. WT % (U		30-MAY-96	B
200236841	96-123-412062	21		URANIUM 235-LBC	YES	YES/NO		30-MAY-96	B
200236841	96-123-412062	21		URANIUM 235-LCE		2 sigma		30-MAY-96	B
200236841	96-123-412062	21		URANIUM 235-LMDC		APPROX. WT % (U		30-MAY-96	B
200236841	96-123-412062	21		URANIUM 235-LTPU		2 sigma		30-MAY-96	B
200236842	96-123-412057	1		URANIUM	124.0	mg/L		30-MAY-96	B
200236843	96-123-412058	2		URANIUM	48.8	mg/L		30-MAY-96	B
200236844	96-123-412059	3		URANIUM	9.6	mg/L		30-MAY-96	B
200236845	96-123-412060	4		URANIUM	31.9	mg/L		30-MAY-96	B
200236846	96-123-412061	5		URANIUM	59.0	mg/L		30-MAY-96	B
200236847	96-123-412062	21		URANIUM	146.4	mg/L		30-MAY-96	B

RELEASE NUMBER : 1000011421
PROJECT NAME : 96-1231 PLANT 1 ENRICHMENT SAMPLING

LAB	SAMPLE ID	USER SAMPLE ID	SAMPLE POINT	SUFFIX	COMPONENT	RESULT	UNITS	LQ	DATE SAMPLED
URA	200237600	96-1231-412063	PLT 1 TANK 6;		URANIUM 235	1.05	APPROX. WT % (U		07-JUN-96
URA	200237600	96-1231-412063	PLT 1 TANK 6;		URANIUM 235-LBC	YES	YES/NO		07-JUN-96
URA	200237600	96-1231-412063	PLT 1 TANK 6;		URANIUM 235-LCE		2 sigma		07-JUN-96
URA	200237600	96-1231-412063	PLT 1 TANK 6;		URANIUM 235-LMDC		APPROX. WT % (U		07-JUN-96
URA	200237600	96-1231-412063	PLT 1 TANK 6;		URANIUM 235-LTPU		2 sigma		07-JUN-96
URA	200237601	96-1231-412063	PLT 1 TANK 6;		URANIUM	45.1	mg/L		07-JUN-96
URA	200237602	96-1231-412064	PLT 1 TANK 7;		URANIUM 235	1.04	APPROX. WT % (U		07-JUN-96
URA	200237602	96-1231-412064	PLT 1 TANK 7;		URANIUM 235-LBC	YES	YES/NO		07-JUN-96
URA	200237602	96-1231-412064	PLT 1 TANK 7;		URANIUM 235-LCE		2 sigma		07-JUN-96
URA	200237602	96-1231-412064	PLT 1 TANK 7;		URANIUM 235-LMDC		APPROX. WT % (U		07-JUN-96
URA	200237602	96-1231-412064	PLT 1 TANK 7;		URANIUM 235-LTPU		2 sigma		07-JUN-96
URA	200237603	96-1231-412064	PLT 1 TANK 7;		URANIUM	22.4	mg/L		07-JUN-96
URA	200237604	96-1231-412065	PLT 1 TANK 8;		URANIUM 235	1.13	APPROX. WT % (U		07-JUN-96
URA	200237604	96-1231-412065	PLT 1 TANK 8;		URANIUM 235-LBC	YES	YES/NO		07-JUN-96
URA	200237604	96-1231-412065	PLT 1 TANK 8;		URANIUM 235-LCE		2 sigma		07-JUN-96
URA	200237604	96-1231-412065	PLT 1 TANK 8;		URANIUM 235-LMDC		APPROX. WT % (U		07-JUN-96
URA	200237604	96-1231-412065	PLT 1 TANK 8;		URANIUM 235-LTPU		2 sigma		07-JUN-96
URA	200237605	96-1231-412065	PLT 1 TANK 8;		URANIUM	20.3	mg/L		07-JUN-96
URA	200237606	96-1231-412066	PLT 1 TANK 12;		URANIUM 235	1.04	APPROX. WT % (U		07-JUN-96
URA	200237606	96-1231-412066	PLT 1 TANK 12;		URANIUM 235-LBC	YES	YES/NO		07-JUN-96
URA	200237606	96-1231-412066	PLT 1 TANK 12;		URANIUM 235-LCE		2 sigma		07-JUN-96
URA	200237606	96-1231-412066	PLT 1 TANK 12;		URANIUM 235-LMDC		APPROX. WT % (U		07-JUN-96
URA	200237606	96-1231-412066	PLT 1 TANK 12;		URANIUM 235-LTPU		2 sigma		07-JUN-96
URA	200237607	96-1231-412066	PLT 1 TANK 12;		URANIUM	22.8	mg/L		07-JUN-96

E 12-JUN-97 SUMMARY REPORT PAGE 3
E 09:09:23

EASE NUMBER : 1000011532
JECT NAME : 96-1231 PLANT 1 ENRICHMENT SAMPLING

SAMPLE ID	USER SAMPLE ID	SAMPLE POINT	SUFFIX	COMPONENT	RESULT	UNITS	LQ	DATE SAMPLED	ASL
200239468	96-1231-412067	PLT 1 TANK 1;		URANIUM 235	1.00	APPROX. WT % (U		17-JUN-96	B
200239468	96-1231-412067	PLT 1 TANK 1;		URANIUM 235-LBC	YES	YES/NO		17-JUN-96	B
200239468	96-1231-412067	PLT 1 TANK 1;		URANIUM 235-LCE		2 sigma		17-JUN-96	B
200239468	96-1231-412067	PLT 1 TANK 1;		URANIUM 235-LMDC		APPROX. WT % (U		17-JUN-96	B
200239468	96-1231-412067	PLT 1 TANK 1;		URANIUM 235-LTPU		2 sigma		17-JUN-96	B
200239469	96-1231-412067	PLT 1 TANK 1;		URANIUM	33.4	mg/L		17-JUN-96	B
200239470	96-1231-412068	PLT 1 TANK 2;		URANIUM 235	0.791	APPROX. WT % (U		17-JUN-96	B
200239470	96-1231-412068	PLT 1 TANK 2;		URANIUM 235-LBC	YES	YES/NO		17-JUN-96	B
200239470	96-1231-412068	PLT 1 TANK 2;		URANIUM 235-LCE		2 sigma		17-JUN-96	B
200239470	96-1231-412068	PLT 1 TANK 2;		URANIUM 235-LMDC		APPROX. WT % (U		17-JUN-96	B
200239470	96-1231-412068	PLT 1 TANK 2;		URANIUM 235-LTPU		2 sigma		17-JUN-96	B
200239471	96-1231-412068	PLT 1 TANK 2;		URANIUM	120	mg/L		17-JUN-96	B
200239472	96-1231-412069	PLT 1 TANK 3;		URANIUM 235	0.999	APPROX. WT % (U		17-JUN-96	B
200239472	96-1231-412069	PLT 1 TANK 3;		URANIUM 235-LBC	YES	YES/NO		17-JUN-96	B
200239472	96-1231-412069	PLT 1 TANK 3;		URANIUM 235-LCE		2 sigma		17-JUN-96	B
200239472	96-1231-412069	PLT 1 TANK 3;		URANIUM 235-LMDC		APPROX. WT % (U		17-JUN-96	B
200239472	96-1231-412069	PLT 1 TANK 3;		URANIUM 235-LTPU		2 sigma		17-JUN-96	B
200239473	96-1231-412069	PLT 1 TANK 3;		URANIUM	65.5	mg/L		17-JUN-96	B
200239474	96-1231-412070	PLT 1 TANK 4;		URANIUM 235	0.976	APPROX. WT % (U		17-JUN-96	B
200239474	96-1231-412070	PLT 1 TANK 4;		URANIUM 235-LBC	YES	YES/NO		17-JUN-96	B
200239474	96-1231-412070	PLT 1 TANK 4;		URANIUM 235-LCE		2 sigma		17-JUN-96	B
200239474	96-1231-412070	PLT 1 TANK 4;		URANIUM 235-LMDC		APPROX. WT % (U		17-JUN-96	B
200239474	96-1231-412070	PLT 1 TANK 4;		URANIUM 235-LTPU		2 sigma		17-JUN-96	B
200239475	96-1231-412070	PLT 1 TANK 4;		URANIUM	34.4	mg/L		17-JUN-96	B
200239476	96-1231-412071	PLT 1 TANK 5;		URANIUM	35.9	mg/L		17-JUN-96	B
200239476	96-1231-412071	PLT 1 TANK 5;		URANIUM 235	0.944	APPROX. WT % (U		17-JUN-96	B
200239476	96-1231-412071	PLT 1 TANK 5;		URANIUM 235-LBC	YES	YES/NO		17-JUN-96	B
200239476	96-1231-412071	PLT 1 TANK 5;		URANIUM 235-LCE		2 sigma		17-JUN-96	B
200239476	96-1231-412071	PLT 1 TANK 5;		URANIUM 235-LMDC		APPROX. WT % (U		17-JUN-96	B
200239476	96-1231-412071	PLT 1 TANK 5;		URANIUM 235-LTPU		2 sigma		17-JUN-96	B

RELEASE NUMBER : 1000011558
PROJECT NAME : 96-1231 PLANT 1 ENRICHMENT SAMPLING

LAB	SAMPLE ID	USER SAMPLE ID	SAMPLE POINT	SUFFIX	COMPONENT	RESULT	UNITS	LQ	DATE SAMPLED
URA	200239942	96-1231-412075	PLT 1 TANK 6;		URANIUM 235	1.04	APPROX. WT % (U		20-JUN-96
URA	200239942	96-1231-412075	PLT 1 TANK 6;		URANIUM 235-LBC	YES	YES/NO		20-JUN-96
URA	200239942	96-1231-412075	PLT 1 TANK 6;		URANIUM 235-LCE		2 sigma		20-JUN-96
URA	200239942	96-1231-412075	PLT 1 TANK 6;		URANIUM 235-LMDC		APPROX. WT % (U		20-JUN-96
URA	200239942	96-1231-412075	PLT 1 TANK 6;		URANIUM 235-LTPU		2 sigma		20-JUN-96
URA	200239943	96-1231-412075	PLT 1 TANK 6;		URANIUM	29.8	mg/L		20-JUN-96
URA	200239944	96-1231-412076	PLT 1 TANK 7;		URANIUM 235	1.08	APPROX. WT % (U		20-JUN-96
URA	200239944	96-1231-412076	PLT 1 TANK 7;		URANIUM 235-LBC	YES	YES/NO		20-JUN-96
URA	200239944	96-1231-412076	PLT 1 TANK 7;		URANIUM 235-LCE		2 sigma		20-JUN-96
URA	200239944	96-1231-412076	PLT 1 TANK 7;		URANIUM 235-LMDC		APPROX. WT % (U		20-JUN-96
URA	200239944	96-1231-412076	PLT 1 TANK 7;		URANIUM 235-LTPU		2 sigma		20-JUN-96
URA	200239945	96-1231-412076	PLT 1 TANK 7;		URANIUM	90.8	mg/L		20-JUN-96
URA	200239946	96-1231-412077	PLT 1 TANK 8;		URANIUM 235	1.20	APPROX. WT % (U		20-JUN-96
URA	200239946	96-1231-412077	PLT 1 TANK 8;		URANIUM 235-LBC	YES	YES/NO		20-JUN-96
URA	200239946	96-1231-412077	PLT 1 TANK 8;		URANIUM 235-LCE		2 sigma		20-JUN-96
URA	200239946	96-1231-412077	PLT 1 TANK 8;		URANIUM 235-LMDC		APPROX. WT % (U		20-JUN-96
URA	200239946	96-1231-412077	PLT 1 TANK 8;		URANIUM 235-LTPU		2 sigma		20-JUN-96
URA	200239947	96-1231-412077	PLT 1 TANK 8;		URANIUM	47.4	mg/L		20-JUN-96
URA	200239948	96-1231-412078	PLT 1 TANK 12;		URANIUM 235	0.962	APPROX. WT % (U		20-JUN-96
URA	200239948	96-1231-412078	PLT 1 TANK 12;		URANIUM 235-LBC	YES	YES/NO		20-JUN-96
URA	200239948	96-1231-412078	PLT 1 TANK 12;		URANIUM 235-LCE		2 sigma		20-JUN-96
URA	200239948	96-1231-412078	PLT 1 TANK 12;		URANIUM 235-LMDC		APPROX. WT % (U		20-JUN-96
URA	200239948	96-1231-412078	PLT 1 TANK 12;		URANIUM 235-LTPU		2 sigma		20-JUN-96
URA	200239949	96-1231-412078	PLT 1 TANK 12;		URANIUM	150	mg/L		20-JUN-96
URA	200239950	96-1231-412079	PLT 1 TANK 9;		URANIUM 235	1.00	APPROX. WT % (U		20-JUN-96
URA	200239950	96-1231-412079	PLT 1 TANK 9;		URANIUM 235-LBC	YES	YES/NO		20-JUN-96
URA	200239950	96-1231-412079	PLT 1 TANK 9;		URANIUM 235-LCE		2 sigma		20-JUN-96
URA	200239950	96-1231-412079	PLT 1 TANK 9;		URANIUM 235-LMDC		APPROX. WT % (U		20-JUN-96
URA	200239950	96-1231-412079	PLT 1 TANK 9;		URANIUM 235-LTPU		2 sigma		20-JUN-96
URA	200239951	96-1231-412079	PLT 1 TANK 9;		URANIUM	44.5	mg/L		20-JUN-96
URA	200239952	96-1231-412080	PLT 1 TANK 10;		URANIUM 235	1.02	APPROX. WT % (U		20-JUN-96
URA	200239952	96-1231-412080	PLT 1 TANK 10;		URANIUM 235-LBC	YES	YES/NO		20-JUN-96
URA	200239952	96-1231-412080	PLT 1 TANK 10;		URANIUM 235-LCE		2 sigma		20-JUN-96
URA	200239952	96-1231-412080	PLT 1 TANK 10;		URANIUM 235-LMDC		APPROX. WT % (U		20-JUN-96
URA	200239952	96-1231-412080	PLT 1 TANK 10;		URANIUM 235-LTPU		2 sigma		20-JUN-96
URA	200239953	96-1231-412080	PLT 1 TANK 10;		URANIUM	40.3	mg/L		20-JUN-96

EASE NUMBER : 1000011653
JECT NAME : 96-1231 PLANT 1 ENRICHMENT SAMPLING

SAMPLE ID	USER SAMPLE ID	SAMPLE POINT	SUFFIX	COMPONENT	RESULT	UNITS	LQ	DATE SAMPLED	ASL
200242169	96-1231-412081	PLT 1 TANK 1;		URANIUM 235	0.940	APPROX. WT % (U		01-JUL-96	B
200242169	96-1231-412081	PLT 1 TANK 1;		URANIUM 235-LBC	YES	YES/NO		01-JUL-96	B
200242169	96-1231-412081	PLT 1 TANK 1;		URANIUM 235-LCE		2 sigma		01-JUL-96	B
200242169	96-1231-412081	PLT 1 TANK 1;		URANIUM 235-LMDC		APPROX. WT % (U		01-JUL-96	B
200242169	96-1231-412081	PLT 1 TANK 1;		URANIUM 235-LTPU		2 sigma		01-JUL-96	B
200242170	96-1231-412081	PLT 1 TANK 1;		URANIUM	29.5	mg/L		01-JUL-96	B
200242171	96-1231-412082	PLT 1 TANK 2;		URANIUM 235	1.99	APPROX. WT % (U		01-JUL-96	B
200242171	96-1231-412082	PLT 1 TANK 2;		URANIUM 235-LBC	YES	YES/NO		01-JUL-96	B
200242171	96-1231-412082	PLT 1 TANK 2;		URANIUM 235-LCE		2 sigma		01-JUL-96	B
200242171	96-1231-412082	PLT 1 TANK 2;		URANIUM 235-LMDC		APPROX. WT % (U		01-JUL-96	B
200242171	96-1231-412082	PLT 1 TANK 2;		URANIUM 235-LTPU		2 sigma		01-JUL-96	B
200242172	96-1231-412082	PLT 1 TANK 2;		URANIUM	430	mg/L		01-JUL-96	B
200242173	96-1231-412083	PLT 1 TANK 3;		URANIUM 235	1.62	APPROX. WT % (U		01-JUL-96	B
200242173	96-1231-412083	PLT 1 TANK 3;		URANIUM 235-LBC	YES	YES/NO		01-JUL-96	B
200242173	96-1231-412083	PLT 1 TANK 3;		URANIUM 235-LCE		2 sigma		01-JUL-96	B
200242173	96-1231-412083	PLT 1 TANK 3;		URANIUM 235-LMDC		APPROX. WT % (U		01-JUL-96	B
200242173	96-1231-412083	PLT 1 TANK 3;		URANIUM 235-LTPU		2 sigma		01-JUL-96	B
200242174	96-1231-412083	PLT 1 TANK 3;		URANIUM	105	mg/L		01-JUL-96	B
200242175	96-1231-412084	PLT 1 TANK 4;		URANIUM 235	1.02	APPROX. WT % (U		01-JUL-96	B
200242175	96-1231-412084	PLT 1 TANK 4;		URANIUM 235-LBC	YES	YES/NO		01-JUL-96	B
200242175	96-1231-412084	PLT 1 TANK 4;		URANIUM 235-LCE		2 sigma		01-JUL-96	B
200242175	96-1231-412084	PLT 1 TANK 4;		URANIUM 235-LMDC		APPROX. WT % (U		01-JUL-96	B
200242175	96-1231-412084	PLT 1 TANK 4;		URANIUM 235-LTPU		2 sigma		01-JUL-96	B
200242176	96-1231-412084	PLT 1 TANK 4;		URANIUM	44.2	mg/L		01-JUL-96	B
200242177	96-1231-412085	DUP TANK 22; 4		URANIUM 235	0.928	APPROX. WT % (U		01-JUL-96	B
200242177	96-1231-412085	DUP TANK 22; 4		URANIUM 235-LBC	YES	YES/NO		01-JUL-96	B
200242177	96-1231-412085	DUP TANK 22; 4		URANIUM 235-LCE		2 sigma		01-JUL-96	B
200242177	96-1231-412085	DUP TANK 22; 4		URANIUM 235-LMDC		APPROX. WT % (U		01-JUL-96	B
200242177	96-1231-412085	DUP TANK 22; 4		URANIUM 235-LTPU		2 sigma		01-JUL-96	B
200242178	96-1231-412085	DUP TANK 22; 4		URANIUM	28.8	mg/L		01-JUL-96	B

RELEASE NUMBER : 1000011821
PROJECT NAME : 96-1231 PLANT 1 ENRICHMENT SAMPLING

LAB	SAMPLE ID	USER SAMPLE ID	SAMPLE POINT	SUFFIX	COMPONENT	RESULT	UNITS	LQ	DATE SAMPLED
URA	200246166	96-1231-412086	PLT 1 TANK 5;		URANIUM 235	1.28	WT % (U)		17-JUL-96
URA	200246166	96-1231-412086	PLT 1 TANK 5;		URANIUM 235-LBC	YES	YES/NO		17-JUL-96
URA	200246166	96-1231-412086	PLT 1 TANK 5;		URANIUM 235-LCE		2 sigma		17-JUL-96
URA	200246166	96-1231-412086	PLT 1 TANK 5;		URANIUM 235-LMDC		WT % (U)		17-JUL-96
URA	200246166	96-1231-412086	PLT 1 TANK 5;		URANIUM 235-LTPU		2 sigma		17-JUL-96
URA	200246167	96-1231-412086	PLT 1 TANK 5;		URANIUM	35.6	mg/L		17-JUL-96
URA	200246168	96-1231-412087	PLT 1 TANK 6;		URANIUM 235	1.35	WT % (U)		17-JUL-96
URA	200246168	96-1231-412087	PLT 1 TANK 6;		URANIUM 235-LBC	YES	YES/NO		17-JUL-96
URA	200246168	96-1231-412087	PLT 1 TANK 6;		URANIUM 235-LCE		2 sigma		17-JUL-96
URA	200246168	96-1231-412087	PLT 1 TANK 6;		URANIUM 235-LMDC		WT % (U)		17-JUL-96
URA	200246168	96-1231-412087	PLT 1 TANK 6;		URANIUM 235-LTPU		2 sigma		17-JUL-96
URA	200246169	96-1231-412087	PLT 1 TANK 6;		URANIUM	54.5	mg/L		17-JUL-96
URA	200246170	96-1231-412088	PLT 1 TANK 7;		URANIUM 235	1.98	WT % (U)		17-JUL-96
URA	200246170	96-1231-412088	PLT 1 TANK 7;		URANIUM 235-LBC	YES	YES/NO		17-JUL-96
URA	200246170	96-1231-412088	PLT 1 TANK 7;		URANIUM 235-LCE		2 sigma		17-JUL-96
URA	200246170	96-1231-412088	PLT 1 TANK 7;		URANIUM 235-LMDC		WT % (U)		17-JUL-96
URA	200246170	96-1231-412088	PLT 1 TANK 7;		URANIUM 235-LTPU		2 sigma		17-JUL-96
URA	200246171	96-1231-412088	PLT 1 TANK 7;		URANIUM	47.8	mg/L		17-JUL-96
URA	200246172	96-1231-412089	PLT 1 TANK 9;		URANIUM 235	1.19	WT % (U)		17-JUL-96
URA	200246172	96-1231-412089	PLT 1 TANK 9;		URANIUM 235-LBC	YES	YES/NO		17-JUL-96
URA	200246172	96-1231-412089	PLT 1 TANK 9;		URANIUM 235-LCE		2 sigma		17-JUL-96
URA	200246172	96-1231-412089	PLT 1 TANK 9;		URANIUM 235-LMDC		WT % (U)		17-JUL-96
URA	200246172	96-1231-412089	PLT 1 TANK 9;		URANIUM 235-LTPU		2 sigma		17-JUL-96
URA	200246173	96-1231-412089	PLT 1 TANK 9;		URANIUM	37.8	mg/L		17-JUL-96

LEASE NUMBER : 1000011947
OJECT NAME : 96-1231 PLANT 1 ENRICHMENT SAMPLING

SAMPLE ID	USER SAMPLE ID	SAMPLE POINT	SUFFIX	COMPONENT	RESULT	UNITS	LQ	DATE SAMPLED	ASL
200248439	96-1231-412096	PLT 1 TANK 1;		URANIUM 235	1.10	WT % (U)		31-JUL-96	B
200248439	96-1231-412096	PLT 1 TANK 1;		URANIUM 235-LBC	YES	YES/NO		31-JUL-96	B
200248439	96-1231-412096	PLT 1 TANK 1;		URANIUM 235-LCE		2 sigma		31-JUL-96	B
200248439	96-1231-412096	PLT 1 TANK 1;		URANIUM 235-LMDC		WT % (U)		31-JUL-96	B
200248439	96-1231-412096	PLT 1 TANK 1;		URANIUM 235-LTPU		2 sigma		31-JUL-96	B
200248440	96-1231-412096	PLT 1 TANK 1;		URANIUM	56.5	mg/L		31-JUL-96	B
200248442	96-1231-412097	PLT 1 TANK 2;		URANIUM 235	1.69	WT % (U)		31-JUL-96	B
200248442	96-1231-412097	PLT 1 TANK 2;		URANIUM 235-LBC	YES	YES/NO		31-JUL-96	B
200248442	96-1231-412097	PLT 1 TANK 2;		URANIUM 235-LCE		2 sigma		31-JUL-96	B
200248442	96-1231-412097	PLT 1 TANK 2;		URANIUM 235-LMDC		WT % (U)		31-JUL-96	B
200248442	96-1231-412097	PLT 1 TANK 2;		URANIUM 235-LTPU		2 sigma		31-JUL-96	B
200248443	96-1231-412097	PLT 1 TANK 2;		URANIUM	140	mg/L		31-JUL-96	B
200248444	96-1231-412098	PLT 1 TANK 3;		URANIUM 235	1.02	WT % (U)		31-JUL-96	B
200248444	96-1231-412098	PLT 1 TANK 3;		URANIUM 235-LBC	YES	YES/NO		31-JUL-96	B
200248444	96-1231-412098	PLT 1 TANK 3;		URANIUM 235-LCE		2 sigma		31-JUL-96	B
200248444	96-1231-412098	PLT 1 TANK 3;		URANIUM 235-LMDC		WT % (U)		31-JUL-96	B
200248444	96-1231-412098	PLT 1 TANK 3;		URANIUM 235-LTPU		2 sigma		31-JUL-96	B
200248445	96-1231-412098	PLT 1 TANK 3;		URANIUM	50.1	mg/L		31-JUL-96	B
200248446	96-1231-412099	PLT 1 TANK 4;		URANIUM 235	0.995	WT % (U)		31-JUL-96	B
200248446	96-1231-412099	PLT 1 TANK 4;		URANIUM 235-LBC	YES	YES/NO		31-JUL-96	B
200248446	96-1231-412099	PLT 1 TANK 4;		URANIUM 235-LCE		2 sigma		31-JUL-96	B
200248446	96-1231-412099	PLT 1 TANK 4;		URANIUM 235-LMDC		WT % (U)		31-JUL-96	B
200248446	96-1231-412099	PLT 1 TANK 4;		URANIUM 235-LTPU		2 sigma		31-JUL-96	B
200248447	96-1231-412099	PLT 1 TANK 4;		URANIUM	56.7	mg/L		31-JUL-96	B
200248448	96-1231-412100	PLT 1 TANK 7;		URANIUM 235	1.30	WT % (U)		31-JUL-96	B
200248448	96-1231-412100	PLT 1 TANK 7;		URANIUM 235-LBC	YES	YES/NO		31-JUL-96	B
200248448	96-1231-412100	PLT 1 TANK 7;		URANIUM 235-LCE		2 sigma		31-JUL-96	B
200248448	96-1231-412100	PLT 1 TANK 7;		URANIUM 235-LMDC		WT % (U)		31-JUL-96	B
200248448	96-1231-412100	PLT 1 TANK 7;		URANIUM 235-LTPU		2 sigma		31-JUL-96	B
200248449	96-1231-412100	PLT 1 TANK 7;		URANIUM	209	mg/L		31-JUL-96	B
200248450	96-1231-412151	PLT 1 TANK 8;		URANIUM 235	0.995	WT % (U)		31-JUL-96	B
200248450	96-1231-412151	PLT 1 TANK 8;		URANIUM 235-LBC	YES	YES/NO		31-JUL-96	B
200248450	96-1231-412151	PLT 1 TANK 8;		URANIUM 235-LCE		2 sigma		31-JUL-96	B
200248450	96-1231-412151	PLT 1 TANK 8;		URANIUM 235-LMDC		WT % (U)		31-JUL-96	B
200248450	96-1231-412151	PLT 1 TANK 8;		URANIUM 235-LTPU		2 sigma		31-JUL-96	B
200248451	96-1231-412151	PLT 1 TANK 8;		URANIUM	59.0	mg/L		31-JUL-96	B

RELEASE NUMBER : 1000012154
PROJECT NAME : 96-1231 PLANT 1 ENRICHMENT SAMPLING

LAB	SAMPLE ID	USER SAMPLE ID	SAMPLE POINT	SUFFIX	COMPONENT	RESULT	UNITS	LQ	DATE SAMPLED
URA	200253549	96-1231-412152	PLT 1 TANK 5;		URANIUM 235	1.14	WT % (U)		28-AUG-96
URA	200253549	96-1231-412152	PLT 1 TANK 5;		URANIUM 235-LBC	YES	YES/NO		28-AUG-96
URA	200253549	96-1231-412152	PLT 1 TANK 5;		URANIUM 235-LCE		2 sigma		28-AUG-96
URA	200253549	96-1231-412152	PLT 1 TANK 5;		URANIUM 235-LMDC		WT % (U)		28-AUG-96
URA	200253549	96-1231-412152	PLT 1 TANK 5;		URANIUM 235-LTPU		2 sigma		28-AUG-96
URA	200253550	96-1231-412152	PLT 1 TANK 5;		URANIUM	59.7	mg/L		28-AUG-96
URA	200253551	96-1231-412153	PLT 1 TANK 6;		URANIUM 235	1.09	APPROX. WT % (U		28-AUG-96
URA	200253551	96-1231-412153	PLT 1 TANK 6;		URANIUM 235-LBC	YES	YES/NO		28-AUG-96
URA	200253551	96-1231-412153	PLT 1 TANK 6;		URANIUM 235-LCE		2 sigma		28-AUG-96
URA	200253551	96-1231-412153	PLT 1 TANK 6;		URANIUM 235-LMDC		APPROX. WT % (U		28-AUG-96
URA	200253551	96-1231-412153	PLT 1 TANK 6;		URANIUM 235-LTPU		2 sigma		28-AUG-96
URA	200253552	96-1231-412153	PLT 1 TANK 6;		URANIUM	30.9	mg/L		28-AUG-96
URA	200253553	96-1231-412154	PLT 1 TANK 9;		URANIUM 235	1.22	WT % (U)		28-AUG-96
URA	200253553	96-1231-412154	PLT 1 TANK 9;		URANIUM 235-LBC	YES	YES/NO		28-AUG-96
URA	200253553	96-1231-412154	PLT 1 TANK 9;		URANIUM 235-LCE		2 sigma		28-AUG-96
URA	200253553	96-1231-412154	PLT 1 TANK 9;		URANIUM 235-LMDC		WT % (U)		28-AUG-96
URA	200253553	96-1231-412154	PLT 1 TANK 9;		URANIUM 235-LTPU		2 sigma		28-AUG-96
URA	200253554	96-1231-412154	PLT 1 TANK 9;		URANIUM	113	mg/L		28-AUG-96
URA	200253555	96-1231-412155	PLT 1 TANK 10;		URANIUM 235	0.970	WT % (U)		28-AUG-96
URA	200253555	96-1231-412155	PLT 1 TANK 10;		URANIUM 235-LBC	YES	YES/NO		28-AUG-96
URA	200253555	96-1231-412155	PLT 1 TANK 10;		URANIUM 235-LCE		2 sigma		28-AUG-96
URA	200253555	96-1231-412155	PLT 1 TANK 10;		URANIUM 235-LMDC		WT % (U)		28-AUG-96
URA	200253555	96-1231-412155	PLT 1 TANK 10;		URANIUM 235-LTPU		2 sigma		28-AUG-96
URA	200253556	96-1231-412155	PLT 1 TANK 10;		URANIUM	73.3	mg/L		28-AUG-96
URA	200253908	96-1231-412156	PLT 1 TANK 1;		URANIUM 235	0.964	WT % (U)		28-AUG-96
URA	200253908	96-1231-412156	PLT 1 TANK 1;		URANIUM 235-LBC	YES	YES/NO		28-AUG-96
URA	200253908	96-1231-412156	PLT 1 TANK 1;		URANIUM 235-LCE		2 sigma		28-AUG-96
URA	200253908	96-1231-412156	PLT 1 TANK 1;		URANIUM 235-LMDC		WT % (U)		28-AUG-96
URA	200253908	96-1231-412156	PLT 1 TANK 1;		URANIUM 235-LTPU		2 sigma		28-AUG-96
URA	200253909	96-1231-412156	PLT 1 TANK 1;		URANIUM	176	mg/L		28-AUG-96
URA	200253910	96-1231-412157	PLT 1 TANK 2;		URANIUM 235	1.12	WT % (U)		28-AUG-96
URA	200253910	96-1231-412157	PLT 1 TANK 2;		URANIUM 235-LBC	YES	YES/NO		28-AUG-96
URA	200253910	96-1231-412157	PLT 1 TANK 2;		URANIUM 235-LCE		2 sigma		28-AUG-96
URA	200253910	96-1231-412157	PLT 1 TANK 2;		URANIUM 235-LMDC		WT % (U)		28-AUG-96
URA	200253910	96-1231-412157	PLT 1 TANK 2;		URANIUM 235-LTPU		2 sigma		28-AUG-96
URA	200253911	96-1231-412157	PLT 1 TANK 2;		URANIUM	254	mg/L		28-AUG-96

:ASE NUMBER : 1000012277
IECT NAME : 96-1231 PLANT 1 ENRICHMENT SAMPLING

SAMPLE ID	USER SAMPLE ID	SAMPLE POINT	SUFFIX	COMPONENT	RESULT	UNITS	LQ	DATE SAMPLED	ASL
200256244	412210	PLT 1 TANK 3;		URANIUM 235	0.991	APPROX. WT % (U		10-SEP-96	B
200256244	412210	PLT 1 TANK 3;		URANIUM 235-LBC	YES	YES/NO		10-SEP-96	B
200256244	412210	PLT 1 TANK 3;		URANIUM 235-LCE		2 sigma		10-SEP-96	B
200256244	412210	PLT 1 TANK 3;		URANIUM 235-LMDC		APPROX. WT % (U		10-SEP-96	B
200256244	412210	PLT 1 TANK 3;		URANIUM 235-LTPU		2 sigma		10-SEP-96	B
200256245	412210	PLT 1 TANK 3;		URANIUM	47.6	mg/L		10-SEP-96	B
200256246	412211	PLT 1 TANK 4;		URANIUM 235	0.835	APPROX. WT % (U		10-SEP-96	B
200256246	412211	PLT 1 TANK 4;		URANIUM 235-LBC	YES	YES/NO		10-SEP-96	B
200256246	412211	PLT 1 TANK 4;		URANIUM 235-LCE		2 sigma		10-SEP-96	B
200256246	412211	PLT 1 TANK 4;		URANIUM 235-LMDC		APPROX. WT % (U		10-SEP-96	B
200256246	412211	PLT 1 TANK 4;		URANIUM 235-LTPU		2 sigma		10-SEP-96	B
200256247	412211	PLT 1 TANK 4;		URANIUM	348	mg/L		10-SEP-96	B
200256248	412212	PLT 1 TANK 7;		URANIUM 235	0.752	APPROX. WT % (U		10-SEP-96	B
200256248	412212	PLT 1 TANK 7;		URANIUM 235-LBC	YES	YES/NO		10-SEP-96	B
200256248	412212	PLT 1 TANK 7;		URANIUM 235-LCE		2 sigma		10-SEP-96	B
200256248	412212	PLT 1 TANK 7;		URANIUM 235-LMDC		APPROX. WT % (U		10-SEP-96	B
200256248	412212	PLT 1 TANK 7;		URANIUM 235-LTPU		2 sigma		10-SEP-96	B
200256249	412212	PLT 1 TANK 7;		URANIUM	331	mg/L		10-SEP-96	B
200256250	412213	PLT 1 TANK 8;		URANIUM 235	0.814	APPROX. WT % (U		10-SEP-96	B
200256250	412213	PLT 1 TANK 8;		URANIUM 235-LBC	YES	YES/NO		10-SEP-96	B
200256250	412213	PLT 1 TANK 8;		URANIUM 235-LCE		2 sigma		10-SEP-96	B
200256250	412213	PLT 1 TANK 8;		URANIUM 235-LMDC		APPROX. WT % (U		10-SEP-96	B
200256250	412213	PLT 1 TANK 8;		URANIUM 235-LTPU		2 sigma		10-SEP-96	B
200256251	412213	PLT 1 TANK 8;		URANIUM	27.3	mg/L		10-SEP-96	B
200256252	412214	DUP TANK 08; 4		URANIUM 235	0.871	APPROX. WT % (U		10-SEP-96	B
200256252	412214	DUP TANK 08; 4		URANIUM 235-LBC	YES	YES/NO		10-SEP-96	B
200256252	412214	DUP TANK 08; 4		URANIUM 235-LCE		2 sigma		10-SEP-96	B
200256252	412214	DUP TANK 08; 4		URANIUM 235-LMDC		APPROX. WT % (U		10-SEP-96	B
200256252	412214	DUP TANK 08; 4		URANIUM 235-LTPU		2 sigma		10-SEP-96	B
200256253	412214	DUP TANK 08; 4		URANIUM	24.9	mg/L		10-SEP-96	B

RELEASE NUMBER : 1000012347
PROJECT NAME : 96-1231 PLANT 1 ENRICHMENT SAMPLING

LAB	SAMPLE ID	USER SAMPLE ID	SAMPLE POINT	SUFFIX	COMPONENT	RESULT	UNITS	LQ	DATE SAMPLED
URA	200258142	412229-TANK 1	PLT 1 TANK 1;		URANIUM 235	0.857	WT % (U)		18-SEP-96
URA	200258142	412229-TANK 1	PLT 1 TANK 1;		URANIUM 235-LBC	YES	YES/NO		18-SEP-96
URA	200258142	412229-TANK 1	PLT 1 TANK 1;		URANIUM 235-LCE		2 sigma		18-SEP-96
URA	200258142	412229-TANK 1	PLT 1 TANK 1;		URANIUM 235-LMDC		WT % (U)		18-SEP-96
URA	200258142	412229-TANK 1	PLT 1 TANK 1;		URANIUM 235-LTPU		2 sigma		18-SEP-96
URA	200258143	412229-TANK 1	PLT 1 TANK 1;		URANIUM	151	mg/L		18-SEP-96
URA	200258144	412230-TANK 2	PLT 1 TANK 2;		URANIUM 235	1.02	WT % (U)		18-SEP-96
URA	200258144	412230-TANK 2	PLT 1 TANK 2;		URANIUM 235-LBC	YES	YES/NO		18-SEP-96
URA	200258144	412230-TANK 2	PLT 1 TANK 2;		URANIUM 235-LCE		2 sigma		18-SEP-96
URA	200258144	412230-TANK 2	PLT 1 TANK 2;		URANIUM 235-LMDC		WT % (U)		18-SEP-96
URA	200258144	412230-TANK 2	PLT 1 TANK 2;		URANIUM 235-LTPU		2 sigma		18-SEP-96
URA	200258145	412230-TANK 2	PLT 1 TANK 2;		URANIUM	485	mg/L		18-SEP-96
URA	200258146	412231-TANK 6	PLT 1 TANK 6;		URANIUM 235	1.01	WT % (U)		18-SEP-96
URA	200258146	412231-TANK 6	PLT 1 TANK 6;		URANIUM 235-LBC	YES	YES/NO		18-SEP-96
URA	200258146	412231-TANK 6	PLT 1 TANK 6;		URANIUM 235-LCE		2 sigma		18-SEP-96
URA	200258146	412231-TANK 6	PLT 1 TANK 6;		URANIUM 235-LMDC		WT % (U)		18-SEP-96
URA	200258146	412231-TANK 6	PLT 1 TANK 6;		URANIUM 235-LTPU		2 sigma		18-SEP-96
URA	200258147	412231-TANK 6	PLT 1 TANK 6;		URANIUM	209	mg/L		18-SEP-96
URA	200258148	412232-TANK 10	PLT 1 TANK 10;		URANIUM 235	0.915	WT % (U)		18-SEP-96
URA	200258148	412232-TANK 10	PLT 1 TANK 10;		URANIUM 235-LBC	YES	YES/NO		18-SEP-96
URA	200258148	412232-TANK 10	PLT 1 TANK 10;		URANIUM 235-LCE		2 sigma		18-SEP-96
URA	200258148	412232-TANK 10	PLT 1 TANK 10;		URANIUM 235-LMDC		WT % (U)		18-SEP-96
URA	200258148	412232-TANK 10	PLT 1 TANK 10;		URANIUM 235-LTPU		2 sigma		18-SEP-96
URA	200258149	412232-TANK 10	PLT 1 TANK 10;		URANIUM	303	mg/L		18-SEP-96
URA	200258150	412233-TANK 11	PLT 1 TANK 11;		URANIUM 235	0.905	WT % (U)		18-SEP-96
URA	200258150	412233-TANK 11	PLT 1 TANK 11;		URANIUM 235-LBC	YES	YES/NO		18-SEP-96
URA	200258150	412233-TANK 11	PLT 1 TANK 11;		URANIUM 235-LCE		2 sigma		18-SEP-96
URA	200258150	412233-TANK 11	PLT 1 TANK 11;		URANIUM 235-LMDC		WT % (U)		18-SEP-96
URA	200258150	412233-TANK 11	PLT 1 TANK 11;		URANIUM 235-LTPU		2 sigma		18-SEP-96
URA	200258151	412233-TANK 11	PLT 1 TANK 11;		URANIUM	63.3	mg/L		18-SEP-96

EASE NUMBER : 1000012468
JECT NAME : 96-1231 PLANT 1 ENRICHMENT SAMPLING

SAMPLE ID	USER SAMPLE ID	SAMPLE POINT	SUFFIX	COMPONENT	RESULT	UNITS	LQ	DATE SAMPLED	ASL
200260529	412234	PLT 1 TANK 3;		URANIUM 235	0.867	WT % (U)		02-OCT-96	B
200260529	412234	PLT 1 TANK 3;		URANIUM 235-LBC	YES	YES/NO		02-OCT-96	B
200260529	412234	PLT 1 TANK 3;		URANIUM 235-LCE		2 sigma		02-OCT-96	B
200260529	412234	PLT 1 TANK 3;		URANIUM 235-LMDC		WT % (U)		02-OCT-96	B
200260529	412234	PLT 1 TANK 3;		URANIUM 235-LTPU		2 sigma		02-OCT-96	B
200260530	412234	PLT 1 TANK 3;		URANIUM	181	mg/L		02-OCT-96	B
200260531	412235	PLT 1 TANK 7;		URANIUM 235	0.798	WT % (U)		02-OCT-96	B
200260531	412235	PLT 1 TANK 7;		URANIUM 235-LBC	YES	YES/NO		02-OCT-96	B
200260531	412235	PLT 1 TANK 7;		URANIUM 235-LCE		2 sigma		02-OCT-96	B
200260531	412235	PLT 1 TANK 7;		URANIUM 235-LMDC		WT % (U)		02-OCT-96	B
200260531	412235	PLT 1 TANK 7;		URANIUM 235-LTPU		2 sigma		02-OCT-96	B
200260532	412235	PLT 1 TANK 7;		URANIUM	154	mg/L		02-OCT-96	B
200260533	412236	PLT 1 TANK 8;		URANIUM 235	0.987	WT % (U)		02-OCT-96	B
200260533	412236	PLT 1 TANK 8;		URANIUM 235-LBC	YES	YES/NO		02-OCT-96	B
200260533	412236	PLT 1 TANK 8;		URANIUM 235-LCE		2 sigma		02-OCT-96	B
200260533	412236	PLT 1 TANK 8;		URANIUM 235-LMDC		WT % (U)		02-OCT-96	B
200260533	412236	PLT 1 TANK 8;		URANIUM 235-LTPU		2 sigma		02-OCT-96	B
200260534	412336	PLT 1 TANK 8;		URANIUM	52.9	mg/L		02-OCT-96	B
200260535	412237	PLT 1 TANK 9;		URANIUM 235	1.02	WT % (U)		02-OCT-96	B
200260535	412237	PLT 1 TANK 9;		URANIUM 235-LBC	YES	YES/NO		02-OCT-96	B
200260535	412237	PLT 1 TANK 9;		URANIUM 235-LCE		2 sigma		02-OCT-96	B
200260535	412237	PLT 1 TANK 9;		URANIUM 235-LMDC		WT % (U)		02-OCT-96	B
200260535	412237	PLT 1 TANK 9;		URANIUM 235-LTPU		2 sigma		02-OCT-96	B
200260536	412337	PLT 1 TANK 9;		URANIUM	31.5	mg/L		02-OCT-96	B
200260541	412239	PLT 1 TANK 1;		URANIUM 235	0.892	WT % (U)		02-OCT-96	B
200260541	412239	PLT 1 TANK 1;		URANIUM 235-LBC	YES	YES/NO		02-OCT-96	B
200260541	412239	PLT 1 TANK 1;		URANIUM 235-LCE		2 sigma		02-OCT-96	B
200260541	412239	PLT 1 TANK 1;		URANIUM 235-LMDC		WT % (U)		02-OCT-96	B
200260541	412239	PLT 1 TANK 1;		URANIUM 235-LTPU		2 sigma		02-OCT-96	B
200260542	412239	PLT 1 TANK 1;		URANIUM	298	mg/L		02-OCT-96	B
200260543	412240	PLT 1 TANK 2;		URANIUM 235	0.855	WT % (U)		02-OCT-96	B
200260543	412240	PLT 1 TANK 2;		URANIUM 235-LBC	YES	YES/NO		02-OCT-96	B
200260543	412240	PLT 1 TANK 2;		URANIUM 235-LCE		2 sigma		02-OCT-96	B
200260543	412240	PLT 1 TANK 2;		URANIUM 235-LMDC		WT % (U)		02-OCT-96	B
200260543	412240	PLT 1 TANK 2;		URANIUM 235-LTPU		2 sigma		02-OCT-96	B
200260544	412240	PLT 1 TANK 2;		URANIUM	574	mg/L		02-OCT-96	B

RELEASE NUMBER : 1000012517
PROJECT NAME : 96-1231 PLANT 1 ENRICHMENT SAMPLING

LAB	SAMPLE ID	USER SAMPLE ID	SAMPLE POINT	SUFFIX	COMPONENT	RESULT	UNITS	LQ	DATE SAMPLED
URA	200261512	412242-TANK 4	PLT 1 TANK 4;		URANIUM 235	0.832	WT % (U)		08-OCT-96
URA	200261512	412242-TANK 4	PLT 1 TANK 4;		URANIUM 235-LBC	YES	YES/NO		08-OCT-96
URA	200261512	412242-TANK 4	PLT 1 TANK 4;		URANIUM 235-LCE		2 sigma		08-OCT-96
URA	200261512	412242-TANK 4	PLT 1 TANK 4;		URANIUM 235-LMDC		WT % (U)		08-OCT-96
URA	200261512	412242-TANK 4	PLT 1 TANK 4;		URANIUM 235-LTPU		2 sigma		08-OCT-96
URA	200261513	412242-TANK 4	PLT 1 TANK 4;		URANIUM	147	mg/L		08-OCT-96
URA	200261514	412243-TANK 5	PLT 1 TANK 5;		URANIUM 235	0.886	WT % (U)		08-OCT-96
URA	200261514	412243-TANK 5	PLT 1 TANK 5;		URANIUM 235-LBC	YES	YES/NO		08-OCT-96
URA	200261514	412243-TANK 5	PLT 1 TANK 5;		URANIUM 235-LCE		2 sigma		08-OCT-96
URA	200261514	412243-TANK 5	PLT 1 TANK 5;		URANIUM 235-LMDC		WT % (U)		08-OCT-96
URA	200261514	412243-TANK 5	PLT 1 TANK 5;		URANIUM 235-LTPU		2 sigma		08-OCT-96
URA	200261515	412243-TANK 5	PLT 1 TANK 5;		URANIUM	174	mg/L		08-OCT-96
URA	200261516	412244-TANK 6	PLT 1 TANK 6;		URANIUM 235	1.03	WT % (U)		08-OCT-96
URA	200261516	412244-TANK 6	PLT 1 TANK 6;		URANIUM 235-LBC	YES	YES/NO		08-OCT-96
URA	200261516	412244-TANK 6	PLT 1 TANK 6;		URANIUM 235-LCE		2 sigma		08-OCT-96
URA	200261516	412244-TANK 6	PLT 1 TANK 6;		URANIUM 235-LMDC		WT % (U)		08-OCT-96
URA	200261516	412244-TANK 6	PLT 1 TANK 6;		URANIUM 235-LTPU		2 sigma		08-OCT-96
URA	200261517	412244-TANK 6	PLT 1 TANK 6;		URANIUM	191	mg/L		08-OCT-96
URA	200261518	412245-TANK 10	PLT 1 TANK 10;		URANIUM 235	0.906	WT % (U)		08-OCT-96
URA	200261518	412245-TANK 10	PLT 1 TANK 10;		URANIUM 235-LBC	YES	YES/NO		08-OCT-96
URA	200261518	412245-TANK 10	PLT 1 TANK 10;		URANIUM 235-LCE		2 sigma		08-OCT-96
URA	200261518	412245-TANK 10	PLT 1 TANK 10;		URANIUM 235-LMDC		WT % (U)		08-OCT-96
URA	200261518	412245-TANK 10	PLT 1 TANK 10;		URANIUM 235-LTPU		2 sigma		08-OCT-96
URA	200261519	412245-TANK 10	PLT 1 TANK 10;		URANIUM	160	mg/L		08-OCT-96
URA	200261520	412246-TANK 11	PLT 1 TANK 11;		URANIUM 235	0.824	WT % (U)		08-OCT-96
URA	200261520	412246-TANK 11	PLT 1 TANK 11;		URANIUM 235-LBC	YES	YES/NO		08-OCT-96
URA	200261520	412246-TANK 11	PLT 1 TANK 11;		URANIUM 235-LCE		2 sigma		08-OCT-96
URA	200261520	412246-TANK 11	PLT 1 TANK 11;		URANIUM 235-LMDC		WT % (U)		08-OCT-96
URA	200261520	412246-TANK 11	PLT 1 TANK 11;		URANIUM 235-LTPU		2 sigma		08-OCT-96
URA	200261521	412246-TANK 11	PLT 1 TANK 11;		URANIUM	75.0	mg/L		08-OCT-96
URA	200261522	412247-TANK 12	PLT 1 TANK 12;		URANIUM 235	0.824	WT % (U)		08-OCT-96
URA	200261522	412247-TANK 12	PLT 1 TANK 12;		URANIUM 235-LBC	YES	YES/NO		08-OCT-96
URA	200261522	412247-TANK 12	PLT 1 TANK 12;		URANIUM 235-LCE		2 sigma		08-OCT-96
URA	200261522	412247-TANK 12	PLT 1 TANK 12;		URANIUM 235-LMDC		WT % (U)		08-OCT-96
URA	200261522	412247-TANK 12	PLT 1 TANK 12;		URANIUM 235-LTPU		2 sigma		08-OCT-96
URA	200261523	412247-TANK 12	PLT 1 TANK 12;		URANIUM	163	mg/L		08-OCT-96

EASE NUMBER : 1000012594
JECT NAME : 96-1231 PLANT 1 ENRICHMENT SAMPLING

SAMPLE ID	USER SAMPLE ID	SAMPLE POINT	SUFFIX	COMPONENT	RESULT	UNITS	LQ	DATE SAMPLED	ASL
200262958	412264-TANK 1	PLT 1 TANK 1;		URANIUM 235	0.940	WT % (U)		17-OCT-96	B
200262958	412264-TANK 1	PLT 1 TANK 1;		URANIUM 235-LBC	YES	YES/NO		17-OCT-96	B
200262958	412264-TANK 1	PLT 1 TANK 1;		URANIUM 235-LCE		2 sigma		17-OCT-96	B
200262958	412264-TANK 1	PLT 1 TANK 1;		URANIUM 235-LMDC		WT % (U)		17-OCT-96	B
200262958	412264-TANK 1	PLT 1 TANK 1;		URANIUM 235-LTPU		2 sigma		17-OCT-96	B
200262959	412264-TANK 1	PLT 1 TANK 1;		URANIUM	207	mg/L		17-OCT-96	B
200262960	412263-TANK 3	PLT 1 TANK 2;		URANIUM 235	1.06	WT % (U)		17-OCT-96	B
200262960	412263-TANK 3	PLT 1 TANK 2;		URANIUM 235-LBC	YES	YES/NO		17-OCT-96	B
200262960	412263-TANK 3	PLT 1 TANK 2;		URANIUM 235-LCE		2 sigma		17-OCT-96	B
200262960	412263-TANK 3	PLT 1 TANK 2;		URANIUM 235-LMDC		WT % (U)		17-OCT-96	B
200262960	412263-TANK 3	PLT 1 TANK 2;		URANIUM 235-LTPU		2 sigma		17-OCT-96	B
200262961	412263-TANK 3	PLT 1 TANK 2;		URANIUM	94.8	mg/L		17-OCT-96	B
200262962	412262-TANK 2	PLT 1 TANK 3;		URANIUM 235	0.955	WT % (U)		17-OCT-96	B
200262962	412262-TANK 2	PLT 1 TANK 3;		URANIUM 235-LBC	YES	YES/NO		17-OCT-96	B
200262962	412262-TANK 2	PLT 1 TANK 3;		URANIUM 235-LCE		2 sigma		17-OCT-96	B
200262962	412262-TANK 2	PLT 1 TANK 3;		URANIUM 235-LMDC		WT % (U)		17-OCT-96	B
200262962	412262-TANK 2	PLT 1 TANK 3;		URANIUM 235-LTPU		2 sigma		17-OCT-96	B
200262963	412262-TANK 2	PLT 1 TANK 3;		URANIUM	244	mg/L		17-OCT-96	B
200262964	412261-TANK 1	DUP TANK 1; 41		URANIUM 235	0.922	WT % (U)		17-OCT-96	B
200262964	412261-TANK 1	DUP TANK 1; 41		URANIUM 235-LBC	YES	YES/NO		17-OCT-96	B
200262964	412261-TANK 1	DUP TANK 1; 41		URANIUM 235-LCE		2 sigma		17-OCT-96	B
200262964	412261-TANK 1	DUP TANK 1; 41		URANIUM 235-LMDC		WT % (U)		17-OCT-96	B
200262964	412261-TANK 1	DUP TANK 1; 41		URANIUM 235-LTPU		2 sigma		17-OCT-96	B
200262965	412261-TANK 1	DUP TANK 1; 41		URANIUM	172	mg/L		17-OCT-96	B

408 RECORDS PRINTED

END OF REPORT

TE 12-JUN-97 SUMMARY REPORT PAGE 1
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LEASE NUMBER : 1000012270
OJECT NAME : 04.116 PLANT 1 DISMANTLING-DECON WATER

SAMPLE ID	USER SAMPLE ID	SAMPLE POINT	SUFFIX	COMPONENT	RESULT	UNITS	LQ	DATE SAMPLED	ASL
200256385	412220	TANK 2		1,1,1,2-TETRACHLOROETHANE	5	ug/L	U	10-SEP-96	B
200256385	412220	TANK 2		1,1,1-TRICHLOROETHANE	5	ug/L	U	10-SEP-96	B
200256385	412220	TANK 2		1,1,2,2-TETRACHLOROETHANE	5	ug/L	U	10-SEP-96	B
200256385	412220	TANK 2		1,1,2-TRICHLOROETHANE	5	ug/L	U	10-SEP-96	B
200256385	412220	TANK 2		1,1-DICHLOROETHANE	5	ug/L	U	10-SEP-96	B
200256385	412220	TANK 2		1,1-DICHLOROETHENE	5	ug/L	U	10-SEP-96	B
200256385	412220	TANK 2		1,1-DICHLOROPROPENE	5	ug/L	U	10-SEP-96	B
200256385	412220	TANK 2		1,2,3-TRICHLOROBENZENE	5	ug/L	U	10-SEP-96	B
200256385	412220	TANK 2		1,2,3-TRICHLOROPROPANE	5	ug/L	U	10-SEP-96	B
200256385	412220	TANK 2		1,2,4-TRICHLOROBENZENE	5	ug/L	U	10-SEP-96	B
200256385	412220	TANK 2		1,2,4-TRIMETHYLBENZENE	5	ug/L	U	10-SEP-96	B
200256385	412220	TANK 2		1,2-DIBROMO-3-CHLOROPROPANE	5	ug/L	U	10-SEP-96	B
200256385	412220	TANK 2		1,2-DIBROMOETHANE	5	ug/L	U	10-SEP-96	B
200256385	412220	TANK 2		1,2-DICHLOROBENZENE	5	ug/L	U	10-SEP-96	B
200256385	412220	TANK 2		1,2-DICHLOROETHANE	5	ug/L	U	10-SEP-96	B
200256385	412220	TANK 2		1,2-DICHLOROPROPANE	5	ug/L	U	10-SEP-96	B
200256385	412220	TANK 2		1,3,5-TRIMETHYLBENZENE	5	ug/L	U	10-SEP-96	B
200256385	412220	TANK 2		1,3-DICHLOROBENZENE	5	ug/L	U	10-SEP-96	B
200256385	412220	TANK 2		1,3-DICHLOROPROPANE	5	ug/L	U	10-SEP-96	B
200256385	412220	TANK 2		1,4-DICHLOROBENZENE	5	ug/L	U	10-SEP-96	B
200256385	412220	TANK 2		2,2-DICHLOROPROPANE	5	ug/L	U	10-SEP-96	B
200256385	412220	TANK 2		2-BUTANONE	50	ug/L	U	10-SEP-96	B
200256385	412220	TANK 2		2-CHLOROTOLUENE	5	ug/L	U	10-SEP-96	B
200256385	412220	TANK 2		2-HEXANONE	50	ug/L	U	10-SEP-96	B
200256385	412220	TANK 2		4-CHLOROTOLUENE	5	ug/L	U	10-SEP-96	B
200256385	412220	TANK 2		4-METHYL-2-PENTANONE	50	ug/L	U	10-SEP-96	B
200256385	412220	TANK 2		ACETONE	50	ug/L	U	10-SEP-96	B
200256385	412220	TANK 2		BENZENE	5	ug/L	U	10-SEP-96	B
200256385	412220	TANK 2		BROMOBENZENE	5	ug/L	U	10-SEP-96	B
200256385	412220	TANK 2		BROMOCHLOROMETHANE	5	ug/L	U	10-SEP-96	B
200256385	412220	TANK 2		BROMODICHLOROMETHANE	5	ug/L	U	10-SEP-96	B
200256385	412220	TANK 2		BROMOFORM	5	ug/L	U	10-SEP-96	B
200256385	412220	TANK 2		BROMOMETHANE	10	ug/L	U	10-SEP-96	B
200256385	412220	TANK 2		CARBON DISULFIDE	50	ug/L	U	10-SEP-96	B
200256385	412220	TANK 2		CARBON TETRACHLORIDE	5	ug/L	U	10-SEP-96	B
200256385	412220	TANK 2		CHLOROBENZENE	5	ug/L	U	10-SEP-96	B
200256385	412220	TANK 2		CHLORODIBROMOMETHANE	5	ug/L	U	10-SEP-96	B
200256385	412220	TANK 2		CHLOROETHANE	10	ug/L	U	10-SEP-96	B
200256385	412220	TANK 2		CHLOROFORM	5	ug/L	U	10-SEP-96	B
200256385	412220	TANK 2		CHLOROMETHANE	10	ug/L	U	10-SEP-96	B
200256385	412220	TANK 2		CIS-1,2-DICHLOROETHENE	5	ug/L	U	10-SEP-96	B
200256385	412220	TANK 2		CIS-1,3-DICHLOROPROPENE	5	ug/L	U	10-SEP-96	B
200256385	412220	TANK 2		DIBROMOMETHANE	5	ug/L	U	10-SEP-96	B
200256385	412220	TANK 2		DICHLORODIFLUOROMETHANE	10	ug/L	U	10-SEP-96	B
200256385	412220	TANK 2		ETHYLBENZENE	5	ug/L	U	10-SEP-96	B
200256385	412220	TANK 2		HEXACHLOROBUTADIENE	5	ug/L	U	10-SEP-96	B
200256385	412220	TANK 2		ISOPROPYL BENZENE	5	ug/L	U	10-SEP-96	B

****

r Selection Criteria Was:
Release Number: % Component: % Submission ID: % Project Name: 04.116%PLANT 1 DISMANTLING%
From Received Date: Display Text? N Include Blanks? N

RELEASE NUMBER : 1000012270
PROJECT NAME : 04.116 PLANT 1 DISMANTLING-DECON WATER

LAB	SAMPLE ID	USER SAMPLE ID	SAMPLE POINT	SUFFIX	COMPONENT	RESULT	UNITS	LQ	DATE SAMPLED	A
AIO	200256385	412220	TANK 2		METHYLENE CHLORIDE	5	ug/L	U	10-SEP-96	B
AIO	200256385	412220	TANK 2		N-BUTYLBENZENE	5	ug/L	U	10-SEP-96	B
AIO	200256385	412220	TANK 2		N-PROPYLBENZENE	5	ug/L	U	10-SEP-96	B
AIO	200256385	412220	TANK 2		NAPHTHALENE	21	ug/L		10-SEP-96	B
AIO	200256385	412220	TANK 2		P-ISOPROPYLTOLUENE	5	ug/L	U	10-SEP-96	B
AIO	200256385	412220	TANK 2		SEC-BUTYLBENZENE	5	ug/L	U	10-SEP-96	B
AIO	200256385	412220	TANK 2		STYRENE	5	ug/L	U	10-SEP-96	B
AIO	200256385	412220	TANK 2		SURR1(DIBROMOFLUOROMETHANE)	102	% RECOVERY		10-SEP-96	B
AIO	200256385	412220	TANK 2		SURR2(TOLUENE-D8)	97	% RECOVERY		10-SEP-96	B
AIO	200256385	412220	TANK 2		SURR3(BROMOFLUOROBENZENE)	92	% RECOVERY		10-SEP-96	B
AIO	200256385	412220	TANK 2		TERT-BUTYLBENZENE	5	ug/L	U	10-SEP-96	B
AIO	200256385	412220	TANK 2		TETRACHLOROETHENE	5	ug/L	U	10-SEP-96	B
AIO	200256385	412220	TANK 2		TOLUENE	5	ug/L	U	10-SEP-96	B
AIO	200256385	412220	TANK 2		TRANS-1,2-DICHLOROETHENE	5	ug/L	U	10-SEP-96	B
AIO	200256385	412220	TANK 2		TRANS-1,3-DICHLOROPROPENE	5	ug/L	U	10-SEP-96	B
AIO	200256385	412220	TANK 2		TRICHLOROETHENE	5	ug/L	U	10-SEP-96	B
AIO	200256385	412220	TANK 2		TRICHLOROFLUOROMETHANE	10	ug/L	U	10-SEP-96	B
AIO	200256385	412220	TANK 2		VINYL ACETATE	50	ug/L	U	10-SEP-96	B
AIO	200256385	412220	TANK 2		VINYL CHLORIDE	10	ug/L	U	10-SEP-96	B
AIO	200256385	412220	TANK 2		XYLENES-M,P	5	ug/L	U	10-SEP-96	B
AIO	200256385	412220	TANK 2		XYLENES-O	5	ug/L	U	10-SEP-96	B
MAX	200256386	412216	TANK 2		AROCLOR 1016	1.0	ug/L	U	10-SEP-96	B
MAX	200256386	412216	TANK 2		AROCLOR 1221	2.0	ug/L	U	10-SEP-96	B
MAX	200256386	412216	TANK 2		AROCLOR 1232	1.0	ug/L	U	10-SEP-96	B
MAX	200256386	412216	TANK 2		AROCLOR 1242	1.0	ug/L	U	10-SEP-96	B
MAX	200256386	412216	TANK 2		AROCLOR 1248	1.0	ug/L	U	10-SEP-96	B
MAX	200256386	412216	TANK 2		AROCLOR 1254	1.0	ug/L	U	10-SEP-96	B
MAX	200256386	412216	TANK 2		AROCLOR 1260	1.0	ug/L	U	10-SEP-96	B
ALP	200256387	412218	TANK 2		ALPHA	18	pCi/mL		10-SEP-96	B
ALP	200256387	412218	TANK 2		ALPHA-LBC	YES	YES/NO		10-SEP-96	B
ALP	200256387	412218	TANK 2		ALPHA-LCE	1.1	2 sigma		10-SEP-96	B
ALP	200256387	412218	TANK 2		ALPHA-LMDC	0.22	pCi/mL		10-SEP-96	B
ALP	200256387	412218	TANK 2		ALPHA-LTPU	3.8	2 sigma		10-SEP-96	B
ALP	200256387	412218	TANK 2		BETA	8.3	pCi/mL		10-SEP-96	B
ALP	200256387	412218	TANK 2		BETA-LBC	YES	YES/NO		10-SEP-96	B
ALP	200256387	412218	TANK 2		BETA-LCE	0.64	2 sigma		10-SEP-96	B
ALP	200256387	412218	TANK 2		BETA-LMDC	0.34	pCi/mL		10-SEP-96	B
ALP	200256387	412218	TANK 2		BETA-LTPU	1.8	2 sigma		10-SEP-96	B
AIO	200256388	412222	TANK 2		ANTIMONY	60	ug/L	U	10-SEP-96	B
AIO	200256388	412222	TANK 2		ARSENIC	10.0	ug/L	U	10-SEP-96	B
AIO	200256388	412222	TANK 2		BARIUM	200	ug/L	U	10-SEP-96	B
AIO	200256388	412222	TANK 2		BERYLLIUM	5.0	ug/L	U	10-SEP-96	B
AIO	200256388	412222	TANK 2		CADMIUM	30.7	ug/L		10-SEP-96	B
AIO	200256388	412222	TANK 2		CHROMIUM	10	ug/L	U	10-SEP-96	B
AIO	200256388	412222	TANK 2		COPPER	46	ug/L		10-SEP-96	B
AIO	200256388	412222	TANK 2		LEAD	349	ug/L		10-SEP-96	B
AIO	200256388	412222	TANK 2		MERCURY	0.45	ug/L		10-SEP-96	B

LEASE NUMBER : 1000012270
OJECT NAME : 04.116 PLANT 1 DISMANTLING-DECON WATER

SAMPLE ID	USER SAMPLE ID	SAMPLE POINT	SUFFIX	COMPONENT	RESULT	UNITS	LQ	DATE SAMPLED	ASL
200256388	412222	TANK 2		NICKEL	150	ug/L		10-SEP-96	B
200256388	412222	TANK 2		SELENIUM	10.0	ug/L	U	10-SEP-96	B
200256388	412222	TANK 2		SILVER	10	ug/L	U	10-SEP-96	B
200256388	412222	TANK 2		ZINC	894	ug/L		10-SEP-96	B
200256389	412221	TANK 2		THORIUM 228	0.27	pCi/L		10-SEP-96	B
200256389	412221	TANK 2		THORIUM 228-LBC	YES	YES/NO		10-SEP-96	B
200256389	412221	TANK 2		THORIUM 228-LCE	0.088	2 sigma		10-SEP-96	B
200256389	412221	TANK 2		THORIUM 228-LMDC	0.082	pCi/L		10-SEP-96	B
200256389	412221	TANK 2		THORIUM 228-LTPU	0.12	2 sigma		10-SEP-96	B
200256389	412221	TANK 2		THORIUM 230	25	pCi/L		10-SEP-96	B
200256389	412221	TANK 2		THORIUM 230-LBC	YES	YES/NO		10-SEP-96	B
200256389	412221	TANK 2		THORIUM 230-LCE	0.59	2 sigma		10-SEP-96	B
200256389	412221	TANK 2		THORIUM 230-LMDC	0.11	pCi/L		10-SEP-96	B
200256389	412221	TANK 2		THORIUM 230-LTPU	5.5	2 sigma		10-SEP-96	B
200256389	412221	TANK 2		THORIUM 232	0.22	pCi/L		10-SEP-96	B
200256389	412221	TANK 2		THORIUM 232-LBC	YES	YES/NO		10-SEP-96	B
200256389	412221	TANK 2		THORIUM 232-LCE	0.083	2 sigma		10-SEP-96	B
200256389	412221	TANK 2		THORIUM 232-LMDC	0.084	pCi/L		10-SEP-96	B
200256389	412221	TANK 2		THORIUM 232-LTPU	0.11	2 sigma		10-SEP-96	B
200256390	412223	TANK 2		URANIUM	19.7	mg/L		10-SEP-96	B
200256390	412223	TANK 2		URANIUM 235	1.23	APPROX. WT % (U		10-SEP-96	B
200256390	412223	TANK 2		URANIUM 235-LBC	YES	YES/NO		10-SEP-96	B
200256390	412223	TANK 2		URANIUM 235-LCE		2 sigma		10-SEP-96	B
200256390	412223	TANK 2		URANIUM 235-LMDC		APPROX. WT % (U		10-SEP-96	B
200256390	412223	TANK 2		URANIUM 235-LTPU		2 sigma		10-SEP-96	B
200256393	412224	TANK 2 DUP		1,1,1,2-TETRACHLOROETHANE	5	ug/L	U	10-SEP-96	B
200256393	412224	TANK 2 DUP		1,1,1-TRICHLOROETHANE	5	ug/L	U	10-SEP-96	B
200256393	412224	TANK 2 DUP		1,1,2,2-TETRACHLOROETHANE	5	ug/L	U	10-SEP-96	B
200256393	412224	TANK 2 DUP		1,1,2-TRICHLOROETHANE	5	ug/L	U	10-SEP-96	B
200256393	412224	TANK 2 DUP		1,1-DICHLOROETHANE	5	ug/L	U	10-SEP-96	B
200256393	412224	TANK 2 DUP		1,1-DICHLOROETHENE	5	ug/L	U	10-SEP-96	B
200256393	412224	TANK 2 DUP		1,1-DICHLOROPROPENE	5	ug/L	U	10-SEP-96	B
200256393	412224	TANK 2 DUP		1,2,3-TRICHLOROBENZENE	5	ug/L	U	10-SEP-96	B
200256393	412224	TANK 2 DUP		1,2,3-TRICHLOROPROPANE	5	ug/L	U	10-SEP-96	B
200256393	412224	TANK 2 DUP		1,2,4-TRICHLOROBENZENE	5	ug/L	U	10-SEP-96	B
200256393	412224	TANK 2 DUP		1,2,4-TRIMETHYLBENZENE	5	ug/L	U	10-SEP-96	B
200256393	412224	TANK 2 DUP		1,2-DIBROMO-3-CHLOROPROPANE	5	ug/L	U	10-SEP-96	B
200256393	412224	TANK 2 DUP		1,2-DIBROMOETHANE	5	ug/L	U	10-SEP-96	B
200256393	412224	TANK 2 DUP		1,2-DICHLOROBENZENE	5	ug/L	U	10-SEP-96	B
200256393	412224	TANK 2 DUP		1,2-DICHLOROETHANE	5	ug/L	U	10-SEP-96	B
200256393	412224	TANK 2 DUP		1,2-DICHLOROPROPANE	5	ug/L	U	10-SEP-96	B
200256393	412224	TANK 2 DUP		1,3,5-TRIMETHYLBENZENE	5	ug/L	U	10-SEP-96	B
200256393	412224	TANK 2 DUP		1,3-DICHLOROBENZENE	5	ug/L	U	10-SEP-96	B
200256393	412224	TANK 2 DUP		1,3-DICHLOROPROPANE	5	ug/L	U	10-SEP-96	B
200256393	412224	TANK 2 DUP		1,4-DICHLOROBENZENE	5	ug/L	U	10-SEP-96	B
200256393	412224	TANK 2 DUP		2,2-DICHLOROPROPANE	5	ug/L	U	10-SEP-96	B
200256393	412224	TANK 2 DUP		2-BUTANONE	50	ug/L	U	10-SEP-96	B

RELEASE NUMBER : 1000012270
PROJECT NAME : 04.116 PLANT 1 DISMANTLING-DECON WATER

LAB	SAMPLE ID	USER SAMPLE ID	SAMPLE POINT	SUFFIX	COMPONENT	RESULT	UNITS	LQ	DATE SAMPLED
AIO	200256393	412224	TANK 2 DUP		2-CHLOROTOLUENE	5	ug/L	U	10-SEP-96
AIO	200256393	412224	TANK 2 DUP		2-HEXANONE	50	ug/L	U	10-SEP-96
AIO	200256393	412224	TANK 2 DUP		4-CHLOROTOLUENE	5	ug/L	U	10-SEP-96
AIO	200256393	412224	TANK 2 DUP		4-METHYL-2-PENTANONE	50	ug/L	U	10-SEP-96
AIO	200256393	412224	TANK 2 DUP		ACETONE	50	ug/L	U	10-SEP-96
AIO	200256393	412224	TANK 2 DUP		BENZENE	5	ug/L	U	10-SEP-96
AIO	200256393	412224	TANK 2 DUP		BROMOBENZENE	5	ug/L	U	10-SEP-96
AIO	200256393	412224	TANK 2 DUP		BROMOCHLOROMETHANE	5	ug/L	U	10-SEP-96
AIO	200256393	412224	TANK 2 DUP		BROMODICHLOROMETHANE	5	ug/L	U	10-SEP-96
AIO	200256393	412224	TANK 2 DUP		BROMOFORM	5	ug/L	U	10-SEP-96
AIO	200256393	412224	TANK 2 DUP		BROMOMETHANE	10	ug/L	U	10-SEP-96
AIO	200256393	412224	TANK 2 DUP		CARBON DISULFIDE	50	ug/L	U	10-SEP-96
AIO	200256393	412224	TANK 2 DUP		CARBON TETRACHLORIDE	5	ug/L	U	10-SEP-96
AIO	200256393	412224	TANK 2 DUP		CHLOROBENZENE	5	ug/L	U	10-SEP-96
AIO	200256393	412224	TANK 2 DUP		CHLORODIBROMOMETHANE	5	ug/L	U	10-SEP-96
AIO	200256393	412224	TANK 2 DUP		CHLOROETHANE	10	ug/L	U	10-SEP-96
AIO	200256393	412224	TANK 2 DUP		CHLOROFORM	5	ug/L	U	10-SEP-96
AIO	200256393	412224	TANK 2 DUP		CHLOROMETHANE	10	ug/L	U	10-SEP-96
AIO	200256393	412224	TANK 2 DUP		CIS-1,2-DICHLOROETHENE	5	ug/L	U	10-SEP-96
AIO	200256393	412224	TANK 2 DUP		CIS-1,3-DICHLOROPROPENE	5	ug/L	U	10-SEP-96
AIO	200256393	412224	TANK 2 DUP		DIBROMOMETHANE	5	ug/L	U	10-SEP-96
AIO	200256393	412224	TANK 2 DUP		DICHLORODIFLUOROMETHANE	10	ug/L	U	10-SEP-96
AIO	200256393	412224	TANK 2 DUP		ETHYLBENZENE	5	ug/L	U	10-SEP-96
AIO	200256393	412224	TANK 2 DUP		HEXACHLOROBUTADIENE	5	ug/L	U	10-SEP-96
AIO	200256393	412224	TANK 2 DUP		ISOPROPYL BENZENE	5	ug/L	U	10-SEP-96
AIO	200256393	412224	TANK 2 DUP		METHYLENE CHLORIDE	5	ug/L	U	10-SEP-96
AIO	200256393	412224	TANK 2 DUP		N-BUTYLBENZENE	5	ug/L	U	10-SEP-96
AIO	200256393	412224	TANK 2 DUP		N-PROPYLBENZENE	5	ug/L	U	10-SEP-96
AIO	200256393	412224	TANK 2 DUP		NAPHTHALENE	23	ug/L		10-SEP-96
AIO	200256393	412224	TANK 2 DUP		P-ISOPROPYLTOLUENE	5	ug/L	U	10-SEP-96
AIO	200256393	412224	TANK 2 DUP		SEC-BUTYLBENZENE	5	ug/L	U	10-SEP-96
AIO	200256393	412224	TANK 2 DUP		STYRENE	5	ug/L	U	10-SEP-96
AIO	200256393	412224	TANK 2 DUP		SURR1(DIBROMOFLUOROMETHANE)	105	% RECOVERY		10-SEP-96
AIO	200256393	412224	TANK 2 DUP		SURR2(TOLUENE-D8)	98	% RECOVERY		10-SEP-96
AIO	200256393	412224	TANK 2 DUP		SURR3(BROMOFLUOROBENZENE)	93	% RECOVERY		10-SEP-96
AIO	200256393	412224	TANK 2 DUP		TERT-BUTYLBENZENE	5	ug/L	U	10-SEP-96
AIO	200256393	412224	TANK 2 DUP		TETRACHLOROETHENE	5	ug/L	U	10-SEP-96
AIO	200256393	412224	TANK 2 DUP		TOLUENE	5	ug/L	U	10-SEP-96
AIO	200256393	412224	TANK 2 DUP		TRANS-1,2-DICHLOROETHENE	5	ug/L	U	10-SEP-96
AIO	200256393	412224	TANK 2 DUP		TRANS-1,3-DICHLOROPROPENE	5	ug/L	U	10-SEP-96
AIO	200256393	412224	TANK 2 DUP		TRICHLOROETHENE	5	ug/L	U	10-SEP-96
AIO	200256393	412224	TANK 2 DUP		TRICHLOROFLUOROMETHANE	10	ug/L	U	10-SEP-96
AIO	200256393	412224	TANK 2 DUP		VINYL ACETATE	50	ug/L	U	10-SEP-96
AIO	200256393	412224	TANK 2 DUP		VINYL CHLORIDE	10	ug/L	U	10-SEP-96
AIO	200256393	412224	TANK 2 DUP		XYLENES-M,P	5	ug/L	U	10-SEP-96
AIO	200256393	412224	TANK 2 DUP		XYLENES-O	5	ug/L	U	10-SEP-96
MAX	200256394	412217	TANK 2 DUP		AROCLOR 1016	1.0	ug/L	U	10-SEP-96

DATE 12-JUN-97 SUMMARY REPORT PAGE 5
TIME 09:09:53

RELEASE NUMBER : 1000012270
PROJECT NAME : 04.116 PLANT 1 DISMANTLING-DECON WATER

LAB	SAMPLE ID	USER SAMPLE ID	SAMPLE POINT	SUFFIX	COMPONENT	RESULT	UNITS	LQ	DATE SAMPLED	ASL
MAX	200256394	412217	TANK 2 DUP		AROCLOR 1221	2.0	ug/L	U	10-SEP-96	B
MAX	200256394	412217	TANK 2 DUP		AROCLOR 1232	1.0	ug/L	U	10-SEP-96	B
MAX	200256394	412217	TANK 2 DUP		AROCLOR 1242	1.0	ug/L	U	10-SEP-96	B
MAX	200256394	412217	TANK 2 DUP		AROCLOR 1248	1.0	ug/L	U	10-SEP-96	B
MAX	200256394	412217	TANK 2 DUP		AROCLOR 1254	1.0	ug/L	U	10-SEP-96	B
MAX	200256394	412217	TANK 2 DUP		AROCLOR 1260	1.0	ug/L	U	10-SEP-96	B
ALP	200256395	412219	TANK 2 DUP		ALPHA	18	pCi/mL		10-SEP-96	B
ALP	200256395	412219	TANK 2 DUP		ALPHA-LBC	YES	YES/NO		10-SEP-96	B
ALP	200256395	412219	TANK 2 DUP		ALPHA-LCE	1.1	2 sigma		10-SEP-96	B
ALP	200256395	412219	TANK 2 DUP		ALPHA-LMDC	0.22	pCi/mL		10-SEP-96	B
ALP	200256395	412219	TANK 2 DUP		ALPHA-LTPU	3.7	2 sigma		10-SEP-96	B
ALP	200256395	412219	TANK 2 DUP		BETA	8.6	pCi/mL		10-SEP-96	B
ALP	200256395	412219	TANK 2 DUP		BETA-LBC	YES	YES/NO		10-SEP-96	B
ALP	200256395	412219	TANK 2 DUP		BETA-LCE	0.66	2 sigma		10-SEP-96	B
ALP	200256395	412219	TANK 2 DUP		BETA-LMDC	0.34	pCi/mL		10-SEP-96	B
ALP	200256395	412219	TANK 2 DUP		BETA-LTPU	1.8	2 sigma		10-SEP-96	B
AIO	200256396	412225	TANK 2 DUP		ANTIMONY	60	ug/L	U	10-SEP-96	B
AIO	200256396	412225	TANK 2 DUP		ARSENIC	10.0	ug/L	U	10-SEP-96	B
AIO	200256396	412225	TANK 2 DUP		BARIUM	200	ug/L	U	10-SEP-96	B
AIO	200256396	412225	TANK 2 DUP		BERYLLIUM	5	ug/L	U	10-SEP-96	B
AIO	200256396	412225	TANK 2 DUP		CADMIUM	33	ug/L		10-SEP-96	B
AIO	200256396	412225	TANK 2 DUP		CHROMIUM	10	ug/L	U	10-SEP-96	B
AIO	200256396	412225	TANK 2 DUP		COPPER	46	ug/L		10-SEP-96	B
AIO	200256396	412225	TANK 2 DUP		LEAD	376	ug/L		10-SEP-96	B
AIO	200256396	412225	TANK 2 DUP		MERCURY	0.41	ug/L		10-SEP-96	B
AIO	200256396	412225	TANK 2 DUP		NICKEL	162	ug/L		10-SEP-96	B
AIO	200256396	412225	TANK 2 DUP		SELENIUM	10.0	ug/L	U	10-SEP-96	B
AIO	200256396	412225	TANK 2 DUP		SILVER	10	ug/L	U	10-SEP-96	B
AIO	200256396	412225	TANK 2 DUP		ZINC	957	ug/L		10-SEP-96	B
RAD	200256397	412226	TANK 2 DUP		THORIUM 228	0.31	pCi/L		10-SEP-96	B
RAD	200256397	412226	TANK 2 DUP		THORIUM 228-LBC	YES	YES/NO		10-SEP-96	B
RAD	200256397	412226	TANK 2 DUP		THORIUM 228-LCE	0.091	2 sigma		10-SEP-96	B
RAD	200256397	412226	TANK 2 DUP		THORIUM 228-LMDC	0.083	pCi/L		10-SEP-96	B
RAD	200256397	412226	TANK 2 DUP		THORIUM 228-LTPU	0.13	2 sigma		10-SEP-96	B
RAD	200256397	412226	TANK 2 DUP		THORIUM 230	25	pCi/L		10-SEP-96	B
RAD	200256397	412226	TANK 2 DUP		THORIUM 230-LBC	YES	YES/NO		10-SEP-96	B
RAD	200256397	412226	TANK 2 DUP		THORIUM 230-LCE	0.61	2 sigma		10-SEP-96	B
RAD	200256397	412226	TANK 2 DUP		THORIUM 230-LMDC	0.11	pCi/L		10-SEP-96	B
RAD	200256397	412226	TANK 2 DUP		THORIUM 230-LTPU	5.6	2 sigma		10-SEP-96	B
RAD	200256397	412226	TANK 2 DUP		THORIUM 232	0.18	pCi/L		10-SEP-96	B
RAD	200256397	412226	TANK 2 DUP		THORIUM 232-LBC	YES	YES/NO		10-SEP-96	B
RAD	200256397	412226	TANK 2 DUP		THORIUM 232-LCE	0.082	2 sigma		10-SEP-96	B
RAD	200256397	412226	TANK 2 DUP		THORIUM 232-LMDC	0.085	pCi/L		10-SEP-96	B
RAD	200256397	412226	TANK 2 DUP		THORIUM 232-LTPU	0.11	2 sigma		10-SEP-96	B
GRA	200256398	412227	TANK 2 DUP		URANIUM	19.3	mg/L		10-SEP-96	B
GRA	200256398	412227	TANK 2 DUP		URANIUM 235	1.26	APPROX. WT % (U		10-SEP-96	B
GRA	200256398	412227	TANK 2 DUP		URANIUM 235-LBC	YES	YES/NO		10-SEP-96	B

RELEASE NUMBER : 1000012270
PROJECT NAME : 04.116 PLANT 1 DISMANTLING-DECON WATER

LAB	SAMPLE ID	USER SAMPLE ID	SAMPLE POINT	SUFFIX	COMPONENT	RESULT	UNITS	LQ	DATE SAMPLED	ASL
URA	200256398	412227	TANK 2 DUP		URANIUM 235-LCE		2 sigma		10-SEP-96	B
URA	200256398	412227	TANK 2 DUP		URANIUM 235-LMDC		APPROX. WT % (U		10-SEP-96	B
URA	200256398	412227	TANK 2 DUP		URANIUM 235-LTPU		2 sigma		10-SEP-96	B
AIO	200256401	412228	TRIP BLANK		1,1,1,2-TETRACHLOROETHANE	5	ug/L	U	10-SEP-96	B
AIO	200256401	412228	TRIP BLANK		1,1,1-TRICHLOROETHANE	5	ug/L	U	10-SEP-96	B
AIO	200256401	412228	TRIP BLANK		1,1,2,2-TETRACHLOROETHANE	5	ug/L	U	10-SEP-96	B
AIO	200256401	412228	TRIP BLANK		1,1,2-TRICHLOROETHANE	5	ug/L	U	10-SEP-96	B
AIO	200256401	412228	TRIP BLANK		1,1-DICHLOROETHANE	5	ug/L	U	10-SEP-96	B
AIO	200256401	412228	TRIP BLANK		1,1-DICHLOROETHENE	5	ug/L	U	10-SEP-96	B
AIO	200256401	412228	TRIP BLANK		1,1-DICHLOROPROPENE	5	ug/L	U	10-SEP-96	B
AIO	200256401	412228	TRIP BLANK		1,2,3-TRICHLOROBENZENE	5	ug/L	U	10-SEP-96	B
AIO	200256401	412228	TRIP BLANK		1,2,3-TRICHLOROPROPANE	5	ug/L	U	10-SEP-96	B
AIO	200256401	412228	TRIP BLANK		1,2,4-TRICHLOROBENZENE	5	ug/L	U	10-SEP-96	B
AIO	200256401	412228	TRIP BLANK		1,2,4-TRIMETHYLBENZENE	5	ug/L	U	10-SEP-96	B
AIO	200256401	412228	TRIP BLANK		1,2-DIBROMO-3-CHLOROPROPANE	5	ug/L	U	10-SEP-96	B
AIO	200256401	412228	TRIP BLANK		1,2-DIBROMOETHANE	5	ug/L	U	10-SEP-96	B
AIO	200256401	412228	TRIP BLANK		1,2-DICHLOROBENZENE	5	ug/L	U	10-SEP-96	B
AIO	200256401	412228	TRIP BLANK		1,2-DICHLOROETHANE	5	ug/L	U	10-SEP-96	B
AIO	200256401	412228	TRIP BLANK		1,2-DICHLOROPROPANE	5	ug/L	U	10-SEP-96	B
AIO	200256401	412228	TRIP BLANK		1,3,5-TRIMETHYLBENZENE	5	ug/L	U	10-SEP-96	B
AIO	200256401	412228	TRIP BLANK		1,3-DICHLOROBENZENE	5	ug/L	U	10-SEP-96	B
AIO	200256401	412228	TRIP BLANK		1,3-DICHLOROPROPANE	5	ug/L	U	10-SEP-96	B
AIO	200256401	412228	TRIP BLANK		1,4-DICHLOROBENZENE	5	ug/L	U	10-SEP-96	B
AIO	200256401	412228	TRIP BLANK		2,2-DICHLOROPROPANE	5	ug/L	U	10-SEP-96	B
AIO	200256401	412228	TRIP BLANK		2-BUTANONE	50	ug/L	U	10-SEP-96	B
AIO	200256401	412228	TRIP BLANK		2-CHLOROTOLUENE	5	ug/L	U	10-SEP-96	B
AIO	200256401	412228	TRIP BLANK		2-HEXANONE	50	ug/L	U	10-SEP-96	B
AIO	200256401	412228	TRIP BLANK		4-CHLOROTOLUENE	5	ug/L	U	10-SEP-96	B
AIO	200256401	412228	TRIP BLANK		4-METHYL-2-PENTANONE	50	ug/L	U	10-SEP-96	B
AIO	200256401	412228	TRIP BLANK		ACETONE	50	ug/L	U	10-SEP-96	B
AIO	200256401	412228	TRIP BLANK		BENZENE	5	ug/L	U	10-SEP-96	B
AIO	200256401	412228	TRIP BLANK		BROMOBENZENE	5	ug/L	U	10-SEP-96	B
AIO	200256401	412228	TRIP BLANK		BROMOCHLOROMETHANE	5	ug/L	U	10-SEP-96	B
AIO	200256401	412228	TRIP BLANK		BROMODICHLOROMETHANE	5	ug/L	U	10-SEP-96	B
AIO	200256401	412228	TRIP BLANK		BROMOFORM	5	ug/L	U	10-SEP-96	B
AIO	200256401	412228	TRIP BLANK		BROMOMETHANE	10	ug/L	U	10-SEP-96	B
AIO	200256401	412228	TRIP BLANK		CARBON DISULFIDE	50	ug/L	U	10-SEP-96	B
AIO	200256401	412228	TRIP BLANK		CARBON TETRACHLORIDE	5	ug/L	U	10-SEP-96	B
AIO	200256401	412228	TRIP BLANK		CHLOROBENZENE	5	ug/L	U	10-SEP-96	B
AIO	200256401	412228	TRIP BLANK		CHLORODIBROMOMETHANE	5	ug/L	U	10-SEP-96	B
AIO	200256401	412228	TRIP BLANK		CHLOROETHANE	10	ug/L	U	10-SEP-96	B
AIO	200256401	412228	TRIP BLANK		CHLOROFORM	5	ug/L	U	10-SEP-96	B
AIO	200256401	412228	TRIP BLANK		CHLOROMETHANE	10	ug/L	U	10-SEP-96	B
AIO	200256401	412228	TRIP BLANK		CIS-1,2-DICHLOROETHENE	5	ug/L	U	10-SEP-96	B
AIO	200256401	412228	TRIP BLANK		CIS-1,3-DICHLOROPROPENE	5	ug/L	U	10-SEP-96	B
AIO	200256401	412228	TRIP BLANK		DIBROMOMETHANE	5	ug/L	U	10-SEP-96	B
AIO	200256401	412228	TRIP BLANK		DICHLORODIFLUOROMETHANE	10	ug/L	U	10-SEP-96	B

ELEASE NUMBER : 1000012270
ROJECT NAME : 04.116 PLANT 1 DISMANTLING-DECON WATER

AB	SAMPLE ID	USER SAMPLE ID	SAMPLE POINT	SUFFIX	COMPONENT	RESULT	UNITS	LQ	DATE SAMPLED	ASL
IO	200256401	412228	TRIP BLANK		ETHYLBENZENE	5	ug/L	U	10-SEP-96	B
IO	200256401	412228	TRIP BLANK		HEXACHLOROBUTADIENE	5	ug/L	U	10-SEP-96	B
IO	200256401	412228	TRIP BLANK		ISOPROPYL BENZENE	5	ug/L	U	10-SEP-96	B
IO	200256401	412228	TRIP BLANK		METHYLENE CHLORIDE	5	ug/L	U	10-SEP-96	B
IO	200256401	412228	TRIP BLANK		N-BUTYLBENZENE	5	ug/L	U	10-SEP-96	B
IO	200256401	412228	TRIP BLANK		N-PROPYLBENZENE	5	ug/L	U	10-SEP-96	B
IO	200256401	412228	TRIP BLANK		NAPHTHALENE	5	ug/L	U	10-SEP-96	B
IO	200256401	412228	TRIP BLANK		P-ISOPROPYLTOLUENE	5	ug/L	U	10-SEP-96	B
IO	200256401	412228	TRIP BLANK		SEC-BUTYLBENZENE	5	ug/L	U	10-SEP-96	B
IO	200256401	412228	TRIP BLANK		STYRENE	5	ug/L	U	10-SEP-96	B
IO	200256401	412228	TRIP BLANK		SURR1(DIBROMOFLUOROMETHANE)	109	% RECOVERY		10-SEP-96	B
IO	200256401	412228	TRIP BLANK		SURR2(TOLUENE-D8)	98	% RECOVERY		10-SEP-96	B
IO	200256401	412228	TRIP BLANK		SURR3(BROMOFLUOROBENZENE)	102	% RECOVERY		10-SEP-96	B
IO	200256401	412228	TRIP BLANK		TERT-BUTYLBENZENE	5	ug/L	U	10-SEP-96	B
IO	200256401	412228	TRIP BLANK		TETRACHLOROETHENE	5	ug/L	U	10-SEP-96	B
IO	200256401	412228	TRIP BLANK		TOLUENE	5	ug/L	U	10-SEP-96	B
IO	200256401	412228	TRIP BLANK		TRANS-1,2-DICHLOROETHENE	5	ug/L	U	10-SEP-96	B
IO	200256401	412228	TRIP BLANK		TRANS-1,3-DICHLOROPROPENE	5	ug/L	U	10-SEP-96	B
IO	200256401	412228	TRIP BLANK		TRICHLOROETHENE	5	ug/L	U	10-SEP-96	B
IO	200256401	412228	TRIP BLANK		TRICHLOROFLUOROMETHANE	10	ug/L	U	10-SEP-96	B
IO	200256401	412228	TRIP BLANK		VINYL ACETATE	50	ug/L	U	10-SEP-96	B
IO	200256401	412228	TRIP BLANK		VINYL CHLORIDE	10	ug/L	U	10-SEP-96	B
IO	200256401	412228	TRIP BLANK		XYLENES-M,P	5	ug/L	U	10-SEP-96	B
IO	200256401	412228	TRIP BLANK		XYLENES-O	5	ug/L	U	10-SEP-96	B

RELEASE NUMBER : 1000012518
PROJECT NAME : 04.116 PLANT 1 DISMANTLING-DECON WATER

LAB	SAMPLE ID	USER SAMPLE ID	SAMPLE POINT	SUFFIX	COMPONENT	RESULT	UNITS	LQ	DATE SAMPLED	ASI
AIO	200261503	412241-TANK 3	TANK 3; 412241		1,1,1,2-TETRACHLOROETHANE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		1,1,1-TRICHLOROETHANE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		1,1,2,2-TETRACHLOROETHANE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		1,1,2-TRICHLOROETHANE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		1,1-DICHLOROETHANE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		1,1-DICHLOROETHENE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		1,1-DICHLOROPROPENE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		1,2,3-TRICHLOROBENZENE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		1,2,3-TRICHLOROPROPANE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		1,2,4-TRICHLOROBENZENE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		1,2,4-TRIMETHYLBENZENE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		1,2-DIBROMO-3-CHLOROPROPANE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		1,2-DIBROMOETHANE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		1,2-DICHLOROBENZENE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		1,2-DICHLOROETHANE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		1,2-DICHLOROPROPANE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		1,3,5-TRIMETHYLBENZENE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		1,3-DICHLOROBENZENE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		1,3-DICHLOROPROPANE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		1,4-DICHLOROBENZENE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		2,2-DICHLOROPROPANE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		2-BUTANONE	50	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		2-CHLOROTOLUENE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		2-HEXANONE	50	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		4-CHLOROTOLUENE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		4-METHYL-2-PENTANONE	50	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		ACETONE	50	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		BENZENE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		BROMOBENZENE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		BROMOCHLOROMETHANE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		BROMODICHLOROMETHANE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		BROMOFORM	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		BROMOMETHANE	10	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		CARBON DISULFIDE	50	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		CARBON TETRACHLORIDE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		CHLOROBENZENE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		CHLORODIBROMOMETHANE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		CHLOROETHANE	10	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		CHLOROFORM	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		CHLOROMETHANE	10	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		CIS-1,2-DICHLOROETHENE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		CIS-1,3-DICHLOROPROPENE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		DIBROMOMETHANE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		DICHLORODIFLUOROMETHANE	10	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		ETHYLBENZENE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		HEXACHLOROBUTADIENE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		ISOPROPYL BENZENE	5	ug/L	U	08-OCT-96	B

DATE 12-JUN-97 SUMMARY REPORT PAGE 9
TIME 09:09:53

RELEASE NUMBER : 1000012518
PROJECT NAME : 04.116 PLANT 1 DISMANTLING-DECON WATER

LAB	SAMPLE ID	USER SAMPLE ID	SAMPLE POINT	SUFFIX	COMPONENT	RESULT	UNITS	LQ	DATE SAMPLED	ASL
AIO	200261503	412241-TANK 3	TANK 3; 412241		METHYLENE CHLORIDE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		N-BUTYLBENZENE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		N-PROPYLBENZENE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		NAPHTHALENE	9.8	ug/L		08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		P-ISOPROPYLTOLUENE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		SEC-BUTYLBENZENE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		STYRENE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		SURR1(DIBROMOFLUOROMETHANE)	91.2	% RECOVERY		08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		SURR2(TOLUENE-D8)	99	% RECOVERY		08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		SURR3(BROMOFLUOROBENZENE)	112	% RECOVERY		08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		TERT-BUTYLBENZENE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		TETRACHLOROETHENE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		TOLUENE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		TRANS-1,2-DICHLOROETHENE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		TRANS-1,3-DICHLOROPROPENE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		TRICHLOROETHENE	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		TRICHLOROFLUOROMETHANE	10	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		VINYL ACETATE	50	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		VINYL CHLORIDE	10	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		XYLENES-M,P	5	ug/L	U	08-OCT-96	B
AIO	200261503	412241-TANK 3	TANK 3; 412241		XYLENES-O	5	ug/L	U	08-OCT-96	B
MAX	200261504	412241	TANK 3; 412241		AROCLOR 1016	1.0	ug/L	U	08-OCT-96	B
MAX	200261504	412241	TANK 3; 412241		AROCLOR 1221	1.0	ug/L	U	08-OCT-96	B
MAX	200261504	412241	TANK 3; 412241		AROCLOR 1232	1.0	ug/L	U	08-OCT-96	B
MAX	200261504	412241	TANK 3; 412241		AROCLOR 1242	1.0	ug/L	U	08-OCT-96	B
MAX	200261504	412241	TANK 3; 412241		AROCLOR 1248	1.0	ug/L	U	08-OCT-96	B
MAX	200261504	412241	TANK 3; 412241		AROCLOR 1254	1.0	ug/L	U	08-OCT-96	B
MAX	200261504	412241	TANK 3; 412241		AROCLOR 1260	3.0	ug/L		08-OCT-96	B
ALP	200261505	412241-TANK 3	TANK 3; 412241		ALPHA	54	pCi/mL		08-OCT-96	B
ALP	200261505	412241-TANK 3	TANK 3; 412241		ALPHA-LBC	YES	YES/NO		08-OCT-96	B
ALP	200261505	412241-TANK 3	TANK 3; 412241		ALPHA-LCE	2.0	2 sigma		08-OCT-96	B
ALP	200261505	412241-TANK 3	TANK 3; 412241		ALPHA-LMDC	0.19	pCi/mL		08-OCT-96	B
ALP	200261505	412241-TANK 3	TANK 3; 412241		ALPHA-LTPU	11	2 sigma		08-OCT-96	B
ALP	200261505	412241-TANK 3	TANK 3; 412241		BETA	24	pCi/mL		08-OCT-96	B
ALP	200261505	412241-TANK 3	TANK 3; 412241		BETA-LBC	YES	YES/NO		08-OCT-96	B
ALP	200261505	412241-TANK 3	TANK 3; 412241		BETA-LCE	1.1	2 sigma		08-OCT-96	B
ALP	200261505	412241-TANK 3	TANK 3; 412241		BETA-LMDC	0.32	pCi/mL		08-OCT-96	B
ALP	200261505	412241-TANK 3	TANK 3; 412241		BETA-LTPU	4.9	2 sigma		08-OCT-96	B
AIO	200261505	412241-TANK 3	TANK 3; 412241		PH	6.91	pH Units		08-OCT-96	B
AIO	200261506	412241-TANK 3	TANK 3; 412241		ANTIMONY	600	ug/L	U	08-OCT-96	B
AIO	200261506	412241-TANK 3	TANK 3; 412241		ARSENIC	100	ug/L	U	08-OCT-96	B
AIO	200261506	412241-TANK 3	TANK 3; 412241		BARIUM	2000	ug/L	U	08-OCT-96	B
AIO	200261506	412241-TANK 3	TANK 3; 412241		BERYLLIUM	50	ug/L	U	08-OCT-96	B
AIO	200261506	412241-TANK 3	TANK 3; 412241		CADMIUM	607	ug/L		08-OCT-96	B
AIO	200261506	412241-TANK 3	TANK 3; 412241		CHROMIUM	347	ug/L		08-OCT-96	B
AIO	200261506	412241-TANK 3	TANK 3; 412241		COPPER	1415	ug/L		08-OCT-96	B
AIO	200261506	412241-TANK 3	TANK 3; 412241		LEAD	26090	ug/L		08-OCT-96	B

RELEASE NUMBER : 1000012518
PROJECT NAME : 04.116 PLANT 1 DISMANTLING-DECON WATER

LAB	SAMPLE ID	USER SAMPLE ID	SAMPLE POINT	SUFFIX	COMPONENT	RESULT	UNITS	LQ	DATE SAMPLED	ASL
AIO	200261506	412241-TANK 3	TANK 3; 412241		MERCURY	14.3	ug/L		08-OCT-96	B
AIO	200261506	412241-TANK 3	TANK 3; 412241		NICKEL	1328	ug/L		08-OCT-96	B
AIO	200261506	412241-TANK 3	TANK 3; 412241		SELENIUM	50.0	ug/L	U	08-OCT-96	B
AIO	200261506	412241-TANK 3	TANK 3; 412241		SILVER	100	ug/L	U	08-OCT-96	B
AIO	200261506	412241-TANK 3	TANK 3; 412241		ZINC	19010	ug/L		08-OCT-96	B
URA	200261508	412241-TANK 3	TANK 3; 412241		URANIUM	54.2	mg/L		08-OCT-96	B
URA	200261508	412241-TANK 3	TANK 3; 412241		URANIUM 235	0.831	WT % (U)		08-OCT-96	B
URA	200261508	412241-TANK 3	TANK 3; 412241		URANIUM 235-LBC	YES	YES/NO		08-OCT-96	B
URA	200261508	412241-TANK 3	TANK 3; 412241		URANIUM 235-LCE		2 sigma		08-OCT-96	B
URA	200261508	412241-TANK 3	TANK 3; 412241		URANIUM 235-LMDC		WT % (U)		08-OCT-96	B
URA	200261508	412241-TANK 3	TANK 3; 412241		URANIUM 235-LTPU		2 sigma		08-OCT-96	B
RAD	200264496	412241-TANK 3	TANK 3		THORIUM 228	210	pCi/L		08-OCT-96	B
RAD	200264496	412241-TANK 3	TANK 3		THORIUM 228-LBC	YES	YES/NO		08-OCT-96	B
RAD	200264496	412241-TANK 3	TANK 3		THORIUM 228-LCE	29	2 sigma		08-OCT-96	B
RAD	200264496	412241-TANK 3	TANK 3		THORIUM 228-LMDC	11	pCi/L		08-OCT-96	B
RAD	200264496	412241-TANK 3	TANK 3		THORIUM 228-LTPU	55	2 sigma		08-OCT-96	B
RAD	200264496	412241-TANK 3	TANK 3		THORIUM 230	20000	pCi/L		08-OCT-96	B
RAD	200264496	412241-TANK 3	TANK 3		THORIUM 230-LBC	YES	YES/NO		08-OCT-96	B
RAD	200264496	412241-TANK 3	TANK 3		THORIUM 230-LCE	280	2 sigma		08-OCT-96	B
RAD	200264496	412241-TANK 3	TANK 3		THORIUM 230-LMDC	20	pCi/L		08-OCT-96	B
RAD	200264496	412241-TANK 3	TANK 3		THORIUM 230-LTPU	4500	2 sigma		08-OCT-96	B
RAD	200264496	412241-TANK 3	TANK 3		THORIUM 232	180	pCi/L		08-OCT-96	B
RAD	200264496	412241-TANK 3	TANK 3		THORIUM 232-LBC	YES	YES/NO		08-OCT-96	B
RAD	200264496	412241-TANK 3	TANK 3		THORIUM 232-LCE	28	2 sigma		08-OCT-96	B
RAD	200264496	412241-TANK 3	TANK 3		THORIUM 232-LMDC	15	pCi/L		08-OCT-96	B
RAD	200264496	412241-TANK 3	TANK 3		THORIUM 232-LTPU	51	2 sigma		08-OCT-96	B

TE 12-JUN-97 SUMMARY REPORT PAGE 11
ME 09:09:53

LEASE NUMBER : 1000012529
OJECT NAME : 04.116 PLANT 1 DISMANTLING-DECON WATER

B	SAMPLE ID	USER SAMPLE ID	SAMPLE POINT	SUFFIX	COMPONENT	RESULT	UNITS	LQ	DATE SAMPLED	ASL
0	200261335	412238	BLDG.67 BASIN		CHROMIUM	26.6	ug/L		09-OCT-96	B
0	200261335	412238	BLDG.67 BASIN		LEAD	223.8	ug/L		09-OCT-96	B

RELEASE NUMBER : 1000012593
PROJECT NAME : 04.116 PLANT 1 DISMANTLING-DECON WATER

LAB	SAMPLE ID	USER SAMPLE ID	SAMPLE POINT	SUFFIX	COMPONENT	RESULT	UNITS	LQ	DATE SAMPLED	AS
AIO	200262945	412258-TANK 1	TANK 1; 412258		1,1,1,2-TETRACHLOROETHANE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		1,1,1-TRICHLOROETHANE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		1,1,2,2-TETRACHLOROETHANE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		1,1,2-TRICHLOROETHANE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		1,1-DICHLOROETHANE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		1,1-DICHLOROETHENE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		1,1-DICHLOROPROPENE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		1,2,3-TRICHLOROBENZENE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		1,2,3-TRICHLOROPROPANE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		1,2,4-TRICHLOROBENZENE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		1,2,4-TRIMETHYLBENZENE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		1,2-DIBROMO-3-CHLOROPROPANE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		1,2-DIBROMOETHANE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		1,2-DICHLOROBENZENE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		1,2-DICHLOROETHANE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		1,2-DICHLOROPROPANE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		1,3,5-TRIMETHYLBENZENE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		1,3-DICHLOROBENZENE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		1,3-DICHLOROPROPANE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		1,4-DICHLOROBENZENE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		2,2-DICHLOROPROPANE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		2-BUTANONE	50	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		2-CHLOROTOLUENE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		2-HEXANONE	50	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		4-CHLOROTOLUENE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		4-METHYL-2-PENTANONE	50	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		ACETONE	50	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		BENZENE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		BROMOBENZENE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		BROMOCHLOROMETHANE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		BROMODICHLOROMETHANE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		BROMOFORM	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		BROMOMETHANE	10	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		CARBON DISULFIDE	50	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		CARBON TETRACHLORIDE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		CHLOROBENZENE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		CHLORODIBROMOMETHANE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		CHLOROETHANE	10	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		CHLOROFORM	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		CHLOROMETHANE	10	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		CIS-1,2-DICHLOROETHENE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		CIS-1,3-DICHLOROPROPENE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		DIBROMOMETHANE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		DICHLORODIFLUOROMETHANE	10	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		ETHYLBENZENE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		HEXACHLOROBUTADIENE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		ISOPROPYL BENZENE	5	ug/L	U	17-OCT-96	B

DATE 12-JUN-97 SUMMARY REPORT PAGE 13
TIME 09:09:53

RELEASE NUMBER : 1000012593
PROJECT NAME : 04.116 PLANT 1 DISMANTLING-DECON WATER

LAB	SAMPLE ID	USER SAMPLE ID	SAMPLE POINT	SUFFIX	COMPONENT	RESULT	UNITS	LQ	DATE SAMPLED	ASL
AIO	200262945	412258-TANK 1	TANK 1; 412258		METHYLENE CHLORIDE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		N-BUTYLBENZENE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		N-PROPYLBENZENE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		NAPHTHALENE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		P-ISOPROPYLTOLUENE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		SEC-BUTYLBENZENE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		STYRENE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		SURR1(DIBROMOFLUOROMETHANE)	114	% RECOVERY		17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		SURR2(TOLUENE-D8)	101	% RECOVERY		17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		SURR3(BROMOFLUOROBENZENE)	104	% RECOVERY		17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		TERT-BUTYLBENZENE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		TETRACHLOROETHENE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		TOLUENE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		TRANS-1,2-DICHLOROETHENE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		TRANS-1,3-DICHLOROPROPENE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		TRICHLOROETHENE	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		TRICHLOROFLUOROMETHANE	10	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		VINYL ACETATE	50	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		VINYL CHLORIDE	10	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		XYLENES-M,P	5	ug/L	U	17-OCT-96	B
AIO	200262945	412258-TANK 1	TANK 1; 412258		XYLENES-O	5	ug/L	U	17-OCT-96	B
AAX	200262946	412258-TANK 1	TANK 1; 412258		AROCLOR 1016	1.0	ug/L	U	17-OCT-96	B
AAX	200262946	412258-TANK 1	TANK 1; 412258		AROCLOR 1221	1.0	ug/L	U	17-OCT-96	B
AAX	200262946	412258-TANK 1	TANK 1; 412258		AROCLOR 1232	1.0	ug/L	U	17-OCT-96	B
AAX	200262946	412258-TANK 1	TANK 1; 412258		AROCLOR 1242	1.0	ug/L	U	17-OCT-96	B
AAX	200262946	412258-TANK 1	TANK 1; 412258		AROCLOR 1248	1.0	ug/L	U	17-OCT-96	B
AAX	200262946	412258-TANK 1	TANK 1; 412258		AROCLOR 1254	1.0	ug/L	U	17-OCT-96	B
AAX	200262946	412258-TANK 1	TANK 1; 412258		AROCLOR 1260	1.0	ug/L	U	17-OCT-96	B
ALP	200262947	412258-TANK 1	TANK 1; 412258		ALPHA	5.3	pCi/mL		17-OCT-96	B
ALP	200262947	412258-TANK 1	TANK 1; 412258		ALPHA-LBC	YES	YES/NO		17-OCT-96	B
ALP	200262947	412258-TANK 1	TANK 1; 412258		ALPHA-LCE	0.61	2 sigma		17-OCT-96	B
ALP	200262947	412258-TANK 1	TANK 1; 412258		ALPHA-LMDC	0.20	pCi/mL		17-OCT-96	B
ALP	200262947	412258-TANK 1	TANK 1; 412258		ALPHA-LTPU	1.2	2 sigma		17-OCT-96	B
ALP	200262947	412258-TANK 1	TANK 1; 412258		BETA	2.6	pCi/mL		17-OCT-96	B
ALP	200262947	412258-TANK 1	TANK 1; 412258		BETA-LBC	YES	YES/NO		17-OCT-96	B
ALP	200262947	412258-TANK 1	TANK 1; 412258		BETA-LCE	0.41	2 sigma		17-OCT-96	B
ALP	200262947	412258-TANK 1	TANK 1; 412258		BETA-LMDC	0.33	pCi/mL		17-OCT-96	B
ALP	200262947	412258-TANK 1	TANK 1; 412258		BETA-LTPU	0.66	2 sigma		17-OCT-96	B
AIO	200262947	412258-TANK 1	TANK 1; 412258		PH	1.03	pH Units		17-OCT-96	B
AIO	200262948	412258-TANK 1	TANK 1; 412258		ANTIMONY	60.0	ug/L	U	17-OCT-96	B
AIO	200262948	412258-TANK 1	TANK 1; 412258		ARSENIC	10.0	ug/L	U	17-OCT-96	B
AIO	200262948	412258-TANK 1	TANK 1; 412258		BARIUM	200	ug/L	U	17-OCT-96	B
AIO	200262948	412258-TANK 1	TANK 1; 412258		BERYLLIUM	5	ug/L	U	17-OCT-96	B
AIO	200262948	412258-TANK 1	TANK 1; 412258		CADMIUM	62.9	ug/L		17-OCT-96	B
AIO	200262948	412258-TANK 1	TANK 1; 412258		CHROMIUM	46.3	ug/L		17-OCT-96	B
AIO	200262948	412258-TANK 1	TANK 1; 412258		COPPER	148	ug/L		17-OCT-96	B
AIO	200262948	412258-TANK 1	TANK 1; 412258		LEAD	1804	ug/L		17-OCT-96	B

RELEASE NUMBER : 1000012593
PROJECT NAME : 04.116 PLANT 1 DISMANTLING-DECON WATER

LAB	SAMPLE ID	USER SAMPLE ID	SAMPLE POINT	SUFFIX	COMPONENT	RESULT	UNITS	LQ	DATE SAMPLED	ASL
AIO	200262948	412258-TANK 1	TANK 1; 412258		MERCURY	0.2	ug/L	U	17-OCT-96	B
AIO	200262948	412258-TANK 1	TANK 1; 412258		NICKEL	199	ug/L		17-OCT-96	B
AIO	200262948	412258-TANK 1	TANK 1; 412258		SELENIUM	8.6	ug/L		17-OCT-96	B
AIO	200262948	412258-TANK 1	TANK 1; 412258		SILVER	10	ug/L	U	17-OCT-96	B
AIO	200262948	412258-TANK 1	TANK 1; 412258		ZINC	1616	ug/L		17-OCT-96	B
URA	200262950	412258-TANK 1	TANK 1; 412258		URANIUM	5.7	mg/L		17-OCT-96	B
URA	200262950	412258-TANK 1	TANK 1; 412258		URANIUM 235	0.831	WT % (U)		17-OCT-96	B
URA	200262950	412258-TANK 1	TANK 1; 412258		URANIUM 235-LBC	YES	YES/NO		17-OCT-96	B
URA	200262950	412258-TANK 1	TANK 1; 412258		URANIUM 235-LCE		2 sigma		17-OCT-96	B
URA	200262950	412258-TANK 1	TANK 1; 412258		URANIUM 235-LMDC		WT % (U)		17-OCT-96	B
URA	200262950	412258-TANK 1	TANK 1; 412258		URANIUM 235-LTPU		2 sigma		17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		1,1,1,2-TETRACHLOROETHANE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		1,1,1-TRICHLOROETHANE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		1,1,2,2-TETRACHLOROETHANE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		1,1,2-TRICHLOROETHANE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		1,1-DICHLOROETHANE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		1,1-DICHLOROETHENE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		1,1-DICHLOROPROPENE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		1,2,3-TRICHLOROBENZENE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		1,2,3-TRICHLOROPROPANE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		1,2,4-TRICHLOROBENZENE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		1,2,4-TRIMETHYLBENZENE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		1,2-DIBROMO-3-CHLOROPROPANE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		1,2-DIBROMOETHANE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		1,2-DICHLOROBENZENE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		1,2-DICHLOROETHANE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		1,2-DICHLOROPROPANE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		1,3,5-TRIMETHYLBENZENE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		1,3-DICHLOROBENZENE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		1,3-DICHLOROPROPANE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		1,4-DICHLOROBENZENE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		2,2-DICHLOROPROPANE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		2-BUTANONE	50	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		2-CHLOROTOLUENE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		2-HEXANONE	50	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		4-CHLOROTOLUENE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		4-METHYL-2-PENTANONE	50	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		ACETONE	50	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		BENZENE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		BROMOBENZENE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		BROMOCHLOROMETHANE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		BROMODICHLOROMETHANE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		BROMOFORM	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		BROMOMETHANE	10	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		CARBON DISULFIDE	50	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		CARBON TETRACHLORIDE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		CHLOROBENZENE	5	ug/L	U	17-OCT-96	B

DATE 12-JUN-97 SUMMARY REPORT PAGE 15
TIME 09:09:53

RELEASE NUMBER : 1000012593
PROJECT NAME : 04.116 PLANT 1 DISMANTLING-DECON WATER

LAB	SAMPLE ID	USER SAMPLE ID	SAMPLE POINT	SUFFIX	COMPONENT	RESULT	UNITS	LQ	DATE SAMPLED	ASL
AIO	200262951	412259-TANK 2	TANK 2; 412259		CHLORODIBROMOMETHANE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		CHLOROETHANE	10	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		CHLOROFORM	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		CHLOROMETHANE	10	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		CIS-1,2-DICHLOROETHENE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		CIS-1,3-DICHLOROPROPENE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		DIBROMOMETHANE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		DICHLORODIFLUOROMETHANE	10	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		ETHYLBENZENE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		HEXACHLOROBUTADIENE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		ISOPROPYL BENZENE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		METHYLENE CHLORIDE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		N-BUTYLBENZENE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		N-PROPYLBENZENE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		NAPHTHALENE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		P-ISOPROPYLTOLUENE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		SEC-BUTYLBENZENE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		STYRENE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		SURR1(DIBROMOFLUOROMETHANE)	115	% RECOVERY		17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		SURR2(TOLUENE-D8)	104	% RECOVERY		17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		SURR3(BROMOFLUOROBENZENE)	104	% RECOVERY		17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		TERT-BUTYLBENZENE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		TETRACHLOROETHENE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		TOLUENE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		TRANS-1,2-DICHLOROETHENE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		TRANS-1,3-DICHLOROPROPENE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		TRICHLOROETHENE	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		TRICHLOROFLUOROMETHANE	10	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		VINYL ACETATE	50	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		VINYL CHLORIDE	10	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		XYLENES-M,P	5	ug/L	U	17-OCT-96	B
AIO	200262951	412259-TANK 2	TANK 2; 412259		XYLENES-O	5	ug/L	U	17-OCT-96	B
AAX	200262952	412259-TANK2	TANK 2; 412259		AROCLOR 1016	1.0	ug/L	U	17-OCT-96	B
AAX	200262952	412259-TANK2	TANK 2; 412259		AROCLOR 1221	1.0	ug/L	U	17-OCT-96	B
AAX	200262952	412259-TANK2	TANK 2; 412259		AROCLOR 1232	1.0	ug/L	U	17-OCT-96	B
AAX	200262952	412259-TANK2	TANK 2; 412259		AROCLOR 1242	1.0	ug/L	U	17-OCT-96	B
AAX	200262952	412259-TANK2	TANK 2; 412259		AROCLOR 1248	2.0	ug/L		17-OCT-96	B
AAX	200262952	412259-TANK2	TANK 2; 412259		AROCLOR 1254	1.0	ug/L	U	17-OCT-96	B
AAX	200262952	412259-TANK2	TANK 2; 412259		AROCLOR 1260	3.7	ug/L		17-OCT-96	B
ALP	200262953	412259-TANK 2	TANK 2; 412259		ALPHA	82	pCi/mL		17-OCT-96	B
ALP	200262953	412259-TANK 2	TANK 2; 412259		ALPHA-LBC	YES	YES/NO		17-OCT-96	B
ALP	200262953	412259-TANK 2	TANK 2; 412259		ALPHA-LCE	2.4	2 sigma		17-OCT-96	B
ALP	200262953	412259-TANK 2	TANK 2; 412259		ALPHA-LMDC	0.21	pCi/mL		17-OCT-96	B
ALP	200262953	412259-TANK 2	TANK 2; 412259		ALPHA-LTPU	17	2 sigma		17-OCT-96	B
ALP	200262953	412259-TANK 2	TANK 2; 412259		BETA	71	pCi/mL		17-OCT-96	B
ALP	200262953	412259-TANK 2	TANK 2; 412259		BETA-LBC	YES	YES/NO		17-OCT-96	B
ALP	200262953	412259-TANK 2	TANK 2; 412259		BETA-LCE	1.8	2 sigma		17-OCT-96	B

RELEASE NUMBER : 1000012593
PROJECT NAME : 04.116 PLANT 1 DISMANTLING-DECON WATER

LAB	SAMPLE ID	USER SAMPLE ID	SAMPLE POINT	SUFFIX	COMPONENT	RESULT	UNITS	LQ	DATE SAMPLED	AS
ALP	200262953	412259-TANK 2	TANK 2; 412259		BETA-LMDC	0.34	pCi/mL		17-OCT-96	B
ALP	200262953	412259-TANK 2	TANK 2; 412259		BETA-LTPU	14	2 sigma		17-OCT-96	B
AIO	200262953	412259-TANK 2	TANK 2; 412259		PH	1.13	pH Units		17-OCT-96	B
AIO	200262954	412259-TANK 2	TANK 2; 412259		ANTIMONY	60.0	ug/L	U	17-OCT-96	B
AIO	200262954	412259-TANK 2	TANK 2; 412259		ARSENIC	10.0	ug/L	U	17-OCT-96	B
AIO	200262954	412259-TANK 2	TANK 2; 412259		BARIUM	200	ug/L	U	17-OCT-96	B
AIO	200262954	412259-TANK 2	TANK 2; 412259		BERYLLIUM	5	ug/L	U	17-OCT-96	B
AIO	200262954	412259-TANK 2	TANK 2; 412259		CADMIUM	10	ug/L	U	17-OCT-96	B
AIO	200262954	412259-TANK 2	TANK 2; 412259		CHROMIUM	10	ug/L	U	17-OCT-96	B
AIO	200262954	412259-TANK 2	TANK 2; 412259		COPPER	50	ug/L	U	17-OCT-96	B
AIO	200262954	412259-TANK 2	TANK 2; 412259		LEAD	160	ug/L		17-OCT-96	B
AIO	200262954	412259-TANK 2	TANK 2; 412259		MERCURY	2.97	ug/L		17-OCT-96	B
AIO	200262954	412259-TANK 2	TANK 2; 412259		NICKEL	60	ug/L	U	17-OCT-96	B
AIO	200262954	412259-TANK 2	TANK 2; 412259		SELENIUM	7.4	ug/L		17-OCT-96	B
AIO	200262954	412259-TANK 2	TANK 2; 412259		SILVER	10	ug/L	U	17-OCT-96	B
AIO	200262954	412259-TANK 2	TANK 2; 412259		ZINC	64.3	ug/L		17-OCT-96	B
URA	200262956	412259-TANK 2	TANK 2; 412259		URANIUM	19.1	mg/L		17-OCT-96	B
URA	200262956	412259-TANK 2	TANK 2; 412259		URANIUM 235	0.898	WT % (U)		17-OCT-96	B
URA	200262956	412259-TANK 2	TANK 2; 412259		URANIUM 235-LBC	YES	YES/NO		17-OCT-96	B
URA	200262956	412259-TANK 2	TANK 2; 412259		URANIUM 235-LCE		2 sigma		17-OCT-96	B
URA	200262956	412259-TANK 2	TANK 2; 412259		URANIUM 235-LMDC		WT % (U)		17-OCT-96	B
URA	200262956	412259-TANK 2	TANK 2; 412259		URANIUM 235-LTPU		2 sigma		17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		1,1,1,2-TETRACHLOROETHANE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		1,1,1-TRICHLOROETHANE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		1,1,2,2-TETRACHLOROETHANE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		1,1,2-TRICHLOROETHANE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		1,1-DICHLOROETHANE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		1,1-DICHLOROETHENE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		1,1-DICHLOROPROPENE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		1,2,3-TRICHLOROBENZENE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		1,2,3-TRICHLOROPROPANE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		1,2,4-TRICHLOROBENZENE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		1,2,4-TRIMETHYLBENZENE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		1,2-DIBROMO-3-CHLOROPROPANE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		1,2-DIBROMOETHANE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		1,2-DICHLOROBENZENE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		1,2-DICHLOROETHANE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		1,2-DICHLOROPROPANE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		1,3,5-TRIMETHYLBENZENE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		1,3-DICHLOROBENZENE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		1,3-DICHLOROPROPANE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		1,4-DICHLOROBENZENE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		2,2-DICHLOROPROPANE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		2-BUTANONE	50	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		2-CHLOROTOLUENE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		2-HEXANONE	50	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		4-CHLOROTOLUENE	5	ug/L	U	17-OCT-96	B

DATE 12-JUN-97 SUMMARY REPORT PAGE 17
TIME 09:09:53

RELEASE NUMBER : 1000012593
PROJECT NAME : 04.116 PLANT 1 DISMANTLING-DECON WATER

LAB	SAMPLE ID	USER SAMPLE ID	SAMPLE POINT	SUFFIX	COMPONENT	RESULT	UNITS	LQ	DATE SAMPLED	ASL
AIO	200262957	412260-TB	TRIP BLANK; 41		4-METHYL-2-PENTANONE	50	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		ACETONE	50	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		BENZENE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		BROMOBENZENE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		BROMOCHLOROMETHANE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		BROMODICHLOROMETHANE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		BROMOFORM	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		BROMOMETHANE	10	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		CARBON DISULFIDE	50	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		CARBON TETRACHLORIDE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		CHLOROBENZENE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		CHLORODIBROMOMETHANE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		CHLOROETHANE	10	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		CHLOROFORM	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		CHLOROMETHANE	10	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		CIS-1,2-DICHLOROETHENE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		CIS-1,3-DICHLOROPROPENE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		DIBROMOMETHANE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		DICHLORODIFLUOROMETHANE	10	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		ETHYLBENZENE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		HEXACHLOROBUTADIENE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		ISOPROPYL BENZENE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		METHYLENE CHLORIDE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		N-BUTYLBENZENE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		N-PROPYLBENZENE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		NAPHTHALENE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		P-ISOPROPYLTOLUENE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		SEC-BUTYLBENZENE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		STYRENE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		SURR1(DIBROMOFLUOROMETHANE)	85	% RECOVERY		17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		SURR2(TOLUENE-D8)	109	% RECOVERY		17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		SURR3(BROMOFLUOROBENZENE)	105	% RECOVERY		17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		TERT-BUTYLBENZENE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		TETRACHLOROETHENE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		TOLUENE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		TRANS-1,2-DICHLOROETHENE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		TRANS-1,3-DICHLOROPROPENE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		TRICHLOROETHENE	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		TRICHLOROFLUOROMETHANE	10	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		VINYL ACETATE	50	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		VINYL CHLORIDE	10	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		XYLENES-M,P	5	ug/L	U	17-OCT-96	B
AIO	200262957	412260-TB	TRIP BLANK; 41		XYLENES-O	5	ug/L	U	17-OCT-96	B
LAD	200264498	412258-TANK 1	TANK 1		THORIUM 228	1.7	pCi/L	U	17-OCT-96	B
LAD	200264498	412258-TANK 1	TANK 1		THORIUM 228-LBC	YES	YES/NO		17-OCT-96	B
LAD	200264498	412258-TANK 1	TANK 1		THORIUM 228-LCE	7.4	2 sigma		17-OCT-96	B
LAD	200264498	412258-TANK 1	TANK 1		THORIUM 228-LMDC	11	pCi/L		17-OCT-96	B

RELEASE NUMBER : 1000012593
PROJECT NAME : 04.116 PLANT 1 DISMANTLING-DECON WATER

LAB	SAMPLE ID	USER SAMPLE ID	SAMPLE POINT	SUFFIX	COMPONENT	RESULT	UNITS	LQ	DATE SAMPLED	A
RAD	200264498	412258-TANK 1	TANK 1		THORIUM 228-LTPU	7.5	2 sigma		17-OCT-96	B
RAD	200264498	412258-TANK 1	TANK 1		THORIUM 230	25	pCi/L		17-OCT-96	B
RAD	200264498	412258-TANK 1	TANK 1		THORIUM 230-LBC	YES	YES/NO		17-OCT-96	B
RAD	200264498	412258-TANK 1	TANK 1		THORIUM 230-LCE	17	2 sigma		17-OCT-96	B
RAD	200264498	412258-TANK 1	TANK 1		THORIUM 230-LMDC	20	pCi/L		17-OCT-96	B
RAD	200264498	412258-TANK 1	TANK 1		THORIUM 230-LTPU	21	2 sigma		17-OCT-96	B
RAD	200264498	412258-TANK 1	TANK 1		THORIUM 232	-6.4	pCi/L	U	17-OCT-96	B
RAD	200264498	412258-TANK 1	TANK 1		THORIUM 232-LBC	YES	YES/NO		17-OCT-96	B
RAD	200264498	412258-TANK 1	TANK 1		THORIUM 232-LCE	9.1	2 sigma		17-OCT-96	B
RAD	200264498	412258-TANK 1	TANK 1		THORIUM 232-LMDC	15	pCi/L		17-OCT-96	B
RAD	200264498	412258-TANK 1	TANK 1		THORIUM 232-LTPU	9.2	2 sigma		17-OCT-96	B
RAD	200264499	412259-TANK 2	TANK 2		THORIUM 228	44	pCi/L		17-OCT-96	B
RAD	200264499	412259-TANK 2	TANK 2		THORIUM 228-LBC	YES	YES/NO		17-OCT-96	B
RAD	200264499	412259-TANK 2	TANK 2		THORIUM 228-LCE	15	2 sigma		17-OCT-96	B
RAD	200264499	412259-TANK 2	TANK 2		THORIUM 228-LMDC	11	pCi/L		17-OCT-96	B
RAD	200264499	412259-TANK 2	TANK 2		THORIUM 228-LTPU	18	2 sigma		17-OCT-96	B
RAD	200264499	412259-TANK 2	TANK 2		THORIUM 230	3700	pCi/L		17-OCT-96	B
RAD	200264499	412259-TANK 2	TANK 2		THORIUM 230-LBC	YES	YES/NO		17-OCT-96	B
RAD	200264499	412259-TANK 2	TANK 2		THORIUM 230-LCE	120	2 sigma		17-OCT-96	B
RAD	200264499	412259-TANK 2	TANK 2		THORIUM 230-LMDC	20	pCi/L		17-OCT-96	B
RAD	200264499	412259-TANK 2	TANK 2		THORIUM 230-LTPU	850	2 sigma		17-OCT-96	B
RAD	200264499	412259-TANK 2	TANK 2		THORIUM 232	46	pCi/L		17-OCT-96	B
RAD	200264499	412259-TANK 2	TANK 2		THORIUM 232-LBC	YES	YES/NO		17-OCT-96	B
RAD	200264499	412259-TANK 2	TANK 2		THORIUM 232-LCE	17	2 sigma		17-OCT-96	B
RAD	200264499	412259-TANK 2	TANK 2		THORIUM 232-LMDC	15	pCi/L		17-OCT-96	B
RAD	200264499	412259-TANK 2	TANK 2		THORIUM 232-LTPU	21	2 sigma		17-OCT-96	B

ELEASE NUMBER : 1000013032
ROJECT NAME : 04.116 PLANT 1 DISMANTLING-DECON WATER

AB	SAMPLE ID	USER SAMPLE ID	SAMPLE POINT	SUFFIX	COMPONENT	RESULT	UNITS	LQ	DATE SAMPLED	ASL
:T	200272856	412278	PLT 1 D & D TA		1,1-DICHLOROETHYLENE	1	ug/L	U	16-DEC-96	B
:T	200272856	412278	PLT 1 D & D TA	DL	1,1-DICHLOROETHYLENE	5	ug/L	U	16-DEC-96	B
:T	200272856	412278	PLT 1 D & D TA		1,2-DICHLOROETHANE	1	ug/L	U	16-DEC-96	B
:T	200272856	412278	PLT 1 D & D TA	DL	1,2-DICHLOROETHANE	5	ug/L	U	16-DEC-96	B
:T	200272856	412278	PLT 1 D & D TA		2-BUTANONE	1	ug/L	U	16-DEC-96	B
:T	200272856	412278	PLT 1 D & D TA	DL	2-BUTANONE	5	ug/L	U	16-DEC-96	B
:T	200272856	412278	PLT 1 D & D TA		BENZENE	1	ug/L	U	16-DEC-96	B
:T	200272856	412278	PLT 1 D & D TA	DL	BENZENE	5	ug/L	U	16-DEC-96	B
:T	200272856	412278	PLT 1 D & D TA		CARBON TETRACHLORIDE	1	ug/L	U	16-DEC-96	B
:T	200272856	412278	PLT 1 D & D TA	DL	CARBON TETRACHLORIDE	5	ug/L	U	16-DEC-96	B
:T	200272856	412278	PLT 1 D & D TA		CHLOROBENZENE	1	ug/L	U	16-DEC-96	B
:T	200272856	412278	PLT 1 D & D TA	DL	CHLOROBENZENE	5	ug/L	U	16-DEC-96	B
:T	200272856	412278	PLT 1 D & D TA		CHLOROFORM	1	ug/L	U	16-DEC-96	B
:T	200272856	412278	PLT 1 D & D TA	DL	CHLOROFORM	5	ug/L	U	16-DEC-96	B
:T	200272856	412278	PLT 1 D & D TA		TETRACHLOROETHYLENE	1	ug/L	U	16-DEC-96	B
:T	200272856	412278	PLT 1 D & D TA	DL	TETRACHLOROETHYLENE	5	ug/L	U	16-DEC-96	B
:T	200272856	412278	PLT 1 D & D TA		TRICHLOROETHYLENE	1	ug/L	U	16-DEC-96	B
:T	200272856	412278	PLT 1 D & D TA	DL	TRICHLOROETHYLENE	5	ug/L	U	16-DEC-96	B
:T	200272856	412278	PLT 1 D & D TA		VINYL CHLORIDE	1	ug/L	U	16-DEC-96	B
:T	200272856	412278	PLT 1 D & D TA	DL	VINYL CHLORIDE	5	ug/L	U	16-DEC-96	B
:T	200272857	412277	PLT 1 D & D TA		AROCLOR 1016	1.0	ug/L	U	17-DEC-96	B
:T	200272857	412277	PLT 1 D & D TA		AROCLOR 1221	1.0	ug/L	U	17-DEC-96	B
:T	200272857	412277	PLT 1 D & D TA		AROCLOR 1232	1.0	ug/L	U	17-DEC-96	B
:T	200272857	412277	PLT 1 D & D TA		AROCLOR 1242	1.0	ug/L	U	17-DEC-96	B
:T	200272857	412277	PLT 1 D & D TA		AROCLOR 1248	1.0	ug/L	U	17-DEC-96	B
:T	200272857	412277	PLT 1 D & D TA		AROCLOR 1254	1.0	ug/L	U	17-DEC-96	B
:T	200272857	412277	PLT 1 D & D TA		AROCLOR 1260	1.4	ug/L		17-DEC-96	B
.P	200272858	412277	PLT 1 D & D TA		ALPHA	14	pCi/mL		16-DEC-96	B
.P	200272858	412277	PLT 1 D & D TA		ALPHA-LBC	YES	YES/NO		16-DEC-96	B
.P	200272858	412277	PLT 1 D & D TA		ALPHA-LCE	0.96	2 sigma		16-DEC-96	B
.P	200272858	412277	PLT 1 D & D TA		ALPHA-LMDC	0.18	pCi/mL		16-DEC-96	B
.P	200272858	412277	PLT 1 D & D TA		ALPHA-LTPU	3.0	2 sigma		16-DEC-96	B
.P	200272858	412277	PLT 1 D & D TA		BETA	11	pCi/mL		16-DEC-96	B
.P	200272858	412277	PLT 1 D & D TA		BETA-LBC	YES	YES/NO		16-DEC-96	B
.P	200272858	412277	PLT 1 D & D TA		BETA-LCE	0.71	2 sigma		16-DEC-96	B
.P	200272858	412277	PLT 1 D & D TA		BETA-LMDC	0.31	pCi/mL		16-DEC-96	B
.P	200272858	412277	PLT 1 D & D TA		BETA-LTPU	2.3	2 sigma		16-DEC-96	B
O	200272858	412277	PLT 1 D & D TA		PH	1.50	pH Units		16-DEC-96	B
O	200272859	412277	PLT 1 D & D TA		ANTIMONY	60	ug/L	U	16-DEC-96	B
O	200272859	412277	PLT 1 D & D TA		ARSENIC	10	ug/L	U	16-DEC-96	B
O	200272859	412277	PLT 1 D & D TA		BARIUM	200	ug/L	U	16-DEC-96	B
O	200272859	412277	PLT 1 D & D TA		BERYLLIUM	5	ug/L	U	16-DEC-96	B
O	200272859	412277	PLT 1 D & D TA		CADMIUM	90.0	ug/L		16-DEC-96	B
O	200272859	412277	PLT 1 D & D TA		CHROMIUM	32.5	ug/L		16-DEC-96	B
O	200272859	412277	PLT 1 D & D TA		COPPER	153.4	ug/L		16-DEC-96	B
O	200272859	412277	PLT 1 D & D TA		LEAD	2349.0	ug/L		16-DEC-96	B
O	200272859	412277	PLT 1 D & D TA		MERCURY	2.45	ug/L		16-DEC-96	B

PLT 1 D&D TA corresponds to tank #408 and PLT 1 D&D TR corresponds to tank #01-728

RELEASE NUMBER : 1000013032
PROJECT NAME : 04.116 PLANT 1 DISMANTLING-DECON WATER

LAB	SAMPLE ID	USER SAMPLE ID	SAMPLE POINT	SUFFIX	COMPONENT	RESULT	UNITS	LQ	DATE SAMPLED	ASL
AIO	200272859	412277	PLT 1 D & D TA		NICKEL	163.7	ug/L		16-DEC-96	B
AIO	200272859	412277	PLT 1 D & D TA		SELENIUM	5	ug/L	U	16-DEC-96	B
AIO	200272859	412277	PLT 1 D & D TA		SILVER	10	ug/L	U	16-DEC-96	B
AIO	200272859	412277	PLT 1 D & D TA		ZINC	2697.0	ug/L		16-DEC-96	B
RAD	200272860	412277	PLT 1 D & D TA		THORIUM 228	26	pCi/L		16-DEC-96	B
RAD	200272860	412277	PLT 1 D & D TA		THORIUM 228-LBC	YES	YES/NO		16-DEC-96	B
RAD	200272860	412277	PLT 1 D & D TA		THORIUM 228-LCE	5.5	2 sigma		16-DEC-96	B
RAD	200272860	412277	PLT 1 D & D TA		THORIUM 228-LMDC	4.4	pCi/L		16-DEC-96	B
RAD	200272860	412277	PLT 1 D & D TA		THORIUM 228-LTPU	8.8	2 sigma		16-DEC-96	B
RAD	200272860	412277	PLT 1 D & D TA		THORIUM 230	2800	pCi/L		16-DEC-96	B
RAD	200272860	412277	PLT 1 D & D TA		THORIUM 230-LBC	YES	YES/NO		16-DEC-96	B
RAD	200272860	412277	PLT 1 D & D TA		THORIUM 230-LCE	45	2 sigma		16-DEC-96	B
RAD	200272860	412277	PLT 1 D & D TA		THORIUM 230-LMDC	7.7	pCi/L		16-DEC-96	B
RAD	200272860	412277	PLT 1 D & D TA		THORIUM 230-LTPU	630	2 sigma		16-DEC-96	B
RAD	200272860	412277	PLT 1 D & D TA		THORIUM 232	27	pCi/L		16-DEC-96	B
RAD	200272860	412277	PLT 1 D & D TA		THORIUM 232-LBC	YES	YES/NO		16-DEC-96	B
RAD	200272860	412277	PLT 1 D & D TA		THORIUM 232-LCE	5.5	2 sigma		16-DEC-96	B
RAD	200272860	412277	PLT 1 D & D TA		THORIUM 232-LMDC	4.6	pCi/L		16-DEC-96	B
RAD	200272860	412277	PLT 1 D & D TA		THORIUM 232-LTPU	9.3	2 sigma		16-DEC-96	B
URA	200272861	412277	PLT 1 D & D TA		URANIUM	17.8	mg/L		16-DEC-96	B
URA	200272861	412277	PLT 1 D & D TA		URANIUM 235	0.913	WT % (U)		16-DEC-96	B
URA	200272861	412277	PLT 1 D & D TA		URANIUM 235-LBC	YES	YES/NO		16-DEC-96	B
URA	200272861	412277	PLT 1 D & D TA		URANIUM 235-LCE		2 sigma		16-DEC-96	B
URA	200272861	412277	PLT 1 D & D TA		URANIUM 235-LMDC		WT % (U)		16-DEC-96	B
URA	200272861	412277	PLT 1 D & D TA		URANIUM 235-LTPU		2 sigma		16-DEC-96	B
TCT	200272862	412277	PLT 1 D & D TR		1,1-DICHLOROETHYLENE	1	ug/L	U	17-DEC-96	B
TCT	200272862	412277	PLT 1 D & D TR		1,2-DICHLOROETHANE	1	ug/L	U	17-DEC-96	B
TCT	200272862	412277	PLT 1 D & D TR		2-BUTANONE	1	ug/L	U	17-DEC-96	B
TCT	200272862	412277	PLT 1 D & D TR		BENZENE	1	ug/L	U	17-DEC-96	B
TCT	200272862	412277	PLT 1 D & D TR		CARBON TETRACHLORIDE	1	ug/L	U	17-DEC-96	B
TCT	200272862	412277	PLT 1 D & D TR		CHLOROBENZENE	1	ug/L	U	17-DEC-96	B
TCT	200272862	412277	PLT 1 D & D TR		CHLOROFORM	1	ug/L	U	17-DEC-96	B
TCT	200272862	412277	PLT 1 D & D TR		TETRACHLOROETHYLENE	1	ug/L	U	17-DEC-96	B
TCT	200272862	412277	PLT 1 D & D TR		TRICHLOROETHYLENE	1	ug/L	U	17-DEC-96	B
TCT	200272862	412277	PLT 1 D & D TR		VINYL CHLORIDE	1	ug/L	U	17-DEC-96	B

*PLT 1 D&D TA corresponds to tank #408 and PLT 1 D&D TR corresponds to tank #01-728

DATE 12-JUN-97 SUMMARY REPORT PAGE 21
TIME 09:09:53

RELEASE NUMBER : 1000013502
PROJECT NAME : 04.116 PLANT 1 DISMANTLING-DECON WATER

LAB	SAMPLE ID	USER SAMPLE ID	SAMPLE POINT	SUFFIX	COMPONENT	RESULT	UNITS	LQ	DATE SAMPLED	ASL
RAD	200285437	412279	#01-728-TNK		THORIUM 228	86	pCi/L		04-MAR-97	B
RAD	200285437	412279	#01-728-TNK		THORIUM 228-LBC	YES	YES/NO		04-MAR-97	B
RAD	200285437	412279	#01-728-TNK		THORIUM 228-LCE	6.0	2 sigma		04-MAR-97	B
RAD	200285437	412279	#01-728-TNK		THORIUM 228-LMDC	3.1	pCi/L		04-MAR-97	B
RAD	200285437	412279	#01-728-TNK		THORIUM 228-LTPU	21	2 sigma		04-MAR-97	B
RAD	200285437	412279	#01-728-TNK		THORIUM 230	3500	pCi/L		04-MAR-97	B
RAD	200285437	412279	#01-728-TNK		THORIUM 230-LBC	YES	YES/NO		04-MAR-97	B
RAD	200285437	412279	#01-728-TNK		THORIUM 230-LCE	37	2 sigma		04-MAR-97	B
RAD	200285437	412279	#01-728-TNK		THORIUM 230-LMDC	2.1	pCi/L		04-MAR-97	B
RAD	200285437	412279	#01-728-TNK		THORIUM 230-LTPU	790	2 sigma		04-MAR-97	B
RAD	200285437	412279	#01-728-TNK		THORIUM 232	35	pCi/L		04-MAR-97	B
RAD	200285437	412279	#01-728-TNK		THORIUM 232-LBC	YES	YES/NO		04-MAR-97	B
RAD	200285437	412279	#01-728-TNK		THORIUM 232-LCE	4.0	2 sigma		04-MAR-97	B
RAD	200285437	412279	#01-728-TNK		THORIUM 232-LMDC	2.9	pCi/L		04-MAR-97	B
RAD	200285437	412279	#01-728-TNK		THORIUM 232-LTPU	9.7	2 sigma		04-MAR-97	B
URA	200285437	412279	#01-728-TNK		URANIUM	1030	mg/L		04-MAR-97	B
URA	200285437	412279	#01-728-TNK		URANIUM 235	0.305	wt %		04-MAR-97	B
URA	200285437	412279	#01-728-TNK		URANIUM 235-LBC	YES	YES/NO		04-MAR-97	B
URA	200285437	412279	#01-728-TNK		URANIUM 235-LCE		2 sigma		04-MAR-97	B
URA	200285437	412279	#01-728-TNK		URANIUM 235-LMDC		wt %		04-MAR-97	B
URA	200285437	412279	#01-728-TNK		URANIUM 235-LTPU		2 sigma		04-MAR-97	B

839 RECORDS PRINTED

END OF REPORT

Attachment D

SITEWIDE WASTE INFORMATION, FORECASTING AND TRACKING SYSTEM (SWIFTS)

REPORTS (3) FOR PLANT 1 COMPLEX - PHASE 1 D&D

SITEWIDE WASTE INFORMATION, FORECASTING, AND TRACKING SYSTEM SWIFTS

Attached are examples from three different SWIFTS reports. Below is a key to interpret the different reports.

Report 1 - Container Inventory Awaiting Off-site Disposal, Treatment, or Certification Meeting OSDF Requirements for Plant 1 D&D by Location

The first column is the Project Number. Plant 1 D&D was assigned Project Number 383.

The second column is the storage location:

0001 - Plant 1 Pad
02/3 - Plant 2/3 Pad
004B - Plant 4 Gravel Area
0004 - Plant 4 gravel area
0007 - Plant 7 gravel area
010A - Building 10 Pad
0056 - Building 67 foundation
0079 - Building 79 inside storage
0080 - Building 80 gravel area

The third column is the specific area within a storage location.

The fourth column is the material type:

011 - Concrete
015 - Oil
028 - Asbestos
065 - Scrap process salts
003 - Non-Recoverable Trash, includes paper, plastic, glass, metal, etc. An additional code is used to identify which type(s) of material are inside the container.

The fifth column is the container code:

030, 055 and 085 are different sizes of drums
200 ISO container
220 Top-loading White Metal Box
300 Small White Metal Box (SWMB)
340 Large White Metal Box
616 Roll-off Box
629 Roll-off container returned from offsite use

The sixth column is the container inventory number, this is the site tracking number.

The seventh column is the serial number on the container from the manufacturer.

The eighth column is the net weight in pounds. A "0" indicates that a container has not been weighed yet

The ninth column is the container's status (shipped off-site/active stored on-site).

SiteWide Waste Information, Forecasting, and Tracking System

Container Inventory Awaiting Off-Site Disposal, Treatment, or

Certification Meeting OSDF Requirements for Plant 1 D&D by Location

=	Loc	Area	Mat	Description	Con	Inv_No	Serial_N	Net Weight	Status
	0001	C	003	TYPE F-MASONRY AND C	340	W153169	420874	6,051	ACTIVE
			003	TYPE F-MASONRY AND C	340	W153209	420914	5,429	ACTIVE
			003	TYPE F-MASONRY AND C	340	W153211	420898	6,507	ACTIVE
			003	TYPE F-MASONRY AND C	340	W153175	420859	6,675	ACTIVE
			003	TYPE F-MASONRY AND C	340	W153213	420886	6,828	ACTIVE
			003	TYPE F-MASONRY AND C	340	W153208	420921	6,666	ACTIVE
		I	003	TYPE F-MASONRY AND C	340	W136797	420279	6,481	ACTIVE
			003	TYPE F-MASONRY AND C	340	W153210	420900	6,199	ACTIVE
			003	TYPE E-CONCRETE	340	W136798	420260	6,110	ACTIVE
			003	TYPE F-MASONRY AND C	340	W136822	420322	6,645	ACTIVE
			003	TYPE F-MASONRY AND C	340	W136498	420033	7,908	ACTIVE
			003	TYPE F-MASONRY AND C	340	W153171	420861	6,690	ACTIVE
			003	TYPE F-MASONRY AND C	340	W136796	420266	6,839	ACTIVE
			003	TYPE F-MASONRY AND C	340	W136834	420317	6,645	ACTIVE
		IP	003	FLOOR SWEEPINGS	055	W307951		176	ACTIVE
			003	FLOOR DEBRIS	055	W162480		0	ACTIVE
			003	GLASS	055	W162485		0	ACTIVE
			003	GLASS	055	W165221		0	ACTIVE
			003	GLASS	055	W165225		0	ACTIVE
			003	OIL SOAKED RAGS	055	W165223		0	ACTIVE
			003	INCANDESCENT LIGHT B	055	W153929		0	ACTIVE
			003	GLASS	055	W165224		0	ACTIVE
			003	GLASS	055	W162486		0	ACTIVE
			003	GLASS	055	W160428		0	ACTIVE
			003	GLASS	055	W160427		0	ACTIVE
			003	VACUUM BAGS WITH FLO	055	W158134		0	ACTIVE
			003	FLOOR SWEEPINGS	055	W307700		0	ACTIVE
			003	INCANDESCENT LIGHT B	055	W307965		0	ACTIVE
			003	GLASS	055	W158132		0	ACTIVE
			003	GLASS	055	W159426		0	ACTIVE
			003	GLASS	055	W160431		0	ACTIVE
			003	GLASS	055	W160429		0	ACTIVE
			003	BALLASTS	055	W307690		0	ACTIVE
			003	OIL SOAKED RAGS	055	W165226		0	ACTIVE
			003	OIL SOAKED RAGS	055	W309423		0	ACTIVE
			003	OIL SOAKED RAGS	055	W165228		0	ACTIVE
			003	FLOOR DEBRIS	055	W165220		0	ACTIVE
			003	FLOOR DEBRIS	055	W160430		0	ACTIVE
			003	FLOOR SWEEPINGS	055	W158148		0	ACTIVE
			003	GLASS	055	W165227		0	ACTIVE
			003	FLOOR DEBRIS	055	W162487		0	ACTIVE
			003	FLOOR DEBRIS	055	W162482		0	ACTIVE
			003	OIL SOAKED RAGS	055	W159661		0	ACTIVE
			003	FLOOR SWEEPINGS	055	W161023		0	ACTIVE
			003	VACUUM BAGS	055	W156926		0	ACTIVE
			003	FLOOR DEBRIS	055	W162479		0	ACTIVE
			003	TYPE H1-PROCESS PIPI	616	W153858	960039	15,540	ACTIVE

SiteWide Waste Information, Forecasting, and Tracking System
Container Inventory Awaiting Off-Site Disposal, Treatment, or
Certification Meeting OSDF Requirements for Plant 1 D&D by Location

#	Loc	Area	Mat	Description	Con	Inv_No	Serial_N	Net Weight	Status
			003	TYPE C PROCESS REGUL	616	W157037	49673	0	ACTIVE
			003	TYPE C PROCESS REGUL	616	W157039	49710	0	ACTIVE
			003	TYPE C PROCESS REGUL	629	W157038	49686	0	ACTIVE
			045	SLUDGES, SALT, SOFT.	055	W165222		0	ACTIVE
			045	SLUDGES, SALT, SOFT.	055	W159425		0	ACTIVE
			045	SLUDGES, SALT, SOFT.	055	W307955		0	ACTIVE
			045	SLUDGES, SALT, SOFT.	055	W165229		0	ACTIVE
			049	LEAD AND LEAD-CONTAM	055	W307961		0	ACTIVE
			050	PCB MATERIALS, BALLA	055	W302083		0	ACTIVE
			069	WET SUMP OR FILTER C	055	W159420		0	ACTIVE
		J	034	MGF2 FOR MILLING OR	055	W161020		266	ACTIVE
		K	003	MASONRY, CONCRETE	340	W136493	420047	4,452	ACTIVE
			003	MASONRY, CONCRETE	340	W136494	420050	5,854	ACTIVE
			003	MASONRY, CONCRETE	340	W136501	420042	4,350	ACTIVE
			003	MASONRY, CONCRETE	340	W136502	420049	5,256	ACTIVE
			003	MASONRY, CONCRETE	340	W151600	420495	5,714	ACTIVE
			003	MASONRY, CONCRETE	340	W151596	420475	5,598	ACTIVE
			003	MASONRY, CONCRETE	340	W151789	420573	5,501	ACTIVE
			003	MASONRY, CONCRETE	340	W151788	420580	5,667	ACTIVE
			003	MASONRY, CONCRETE	340	W136762	420247	4,412	ACTIVE
			003	MASONRY, CONCRETE	340	W151920	420708	6,102	ACTIVE
		L	003	SCRAP METAL, WOOD, P	200	W159228	500331	13,550	ACTIVE
			003	SCRAP METAL, WOOD, P	200	W159230	500323	12,010	ACTIVE
			003	SCRAP METAL, WOOD, P	200	W159229	500337	21,720	ACTIVE
		L (STAGED	003	SCRAP METAL, WOOD, P	200	W159227	500326	16,650	ACTIVE
		L STAGING	003	SCRAP METAL, WOOD, P	220	W161584	600037	28,490	ACTIVE
		N	028	CONTAMINATED ASBESTO	200	W151227	500168	0	ACTIVE
			028	CONTAMINATED ASBESTO	200	W151418	500184	6,870	ACTIVE
			028	CONTAMINATED ASBESTO	200	W151225	500171	0	ACTIVE
		TS4	003	FLOOR SWEEPINGS	055	W307688		219	ACTIVE
			003	FLOOR SWEEPINGS	055	W153915		310	ACTIVE
			003	FLOOR SWEEPINGS	055	W153914		321	ACTIVE
			003	FLOOR SWEEPINGS	055	W307687		780	ACTIVE
			003	FLOOR SWEEPINGS	055	W161022		371	ACTIVE
			003	FLOOR SWEEPINGS	055	W158565		305	ACTIVE
			003	FLOOR SWEEPINGS	055	W158560		336	ACTIVE
			003	FLOOR SWEEPINGS	055	W153923		328	ACTIVE
			003	FLOOR SWEEPINGS	055	W153917		273	ACTIVE
			003	FLOOR SWEEPINGS	055	W161021		441	ACTIVE
			003	FLOOR SWEEPINGS	055	W307964		345	ACTIVE
			003	FLOOR SWEEPINGS	055	W309300		462	ACTIVE
			003	NON-RECOVERABLE TRAS	055	W153918		184	ACTIVE
			003	NON-RECOVERABLE TRAS	055	W159658		143	ACTIVE
			003	NON-RECOVERABLE TRAS	055	W307699		87	ACTIVE
			003	FLOOR SWEEPINGS	055	W153916		340	ACTIVE
			003	FLOOR SWEEPINGS	055	W307695		436	ACTIVE
			003	FLOOR SWEEPINGS	055	W158151		186	ACTIVE

SiteWide Waste Information, Forecasting, and Tracking System

Container Inventory Awaiting Off-Site Disposal, Treatment, or

Certification Meeting OSDF Requirements for Plant 1 D&D by Location

Loc	Area	Mat	Description	Con	Inv_No	Serial_N	Net Weight	Status
		003	VACUUM BAGS	055	W158128		156	ACTIVE
		003	FLOOR SWEEPINGS	055	W159418		359	ACTIVE
		003	FLOOR SWEEPINGS	055	W158136		382	ACTIVE
		003	FLOOR SWEEPINGS	055	W158130		183	ACTIVE
		003	VACUUM BAGS	055	W158140		192	ACTIVE
		003	FLOOR SWEEPINGS	055	W158142		228	ACTIVE
		003	FLOOR SWEEPINGS	055	W159421		402	ACTIVE
		003	FLOOR SWEEPINGS	055	W159417		192	ACTIVE
		003	FLOOR SWEEPINGS	055	W158149		800	ACTIVE
		003	FLOOR SWEEPINGS	055	W158144		663	ACTIVE
		003	FLOOR SWEEPINGS	055	W158137		789	ACTIVE
		003	FLOOR SWEEPINGS	055	W158135		576	ACTIVE
		003	FLOOR SWEEPINGS	055	W158127		263	ACTIVE
		003	GLASS	055	W153930		164	ACTIVE
		003	FLOOR SWEEPINGS	055	W159664		492	ACTIVE
		003	FLOOR SWEEPINGS	055	W159663		559	ACTIVE
		003	FLOOR SWEEPINGS	055	W159660		166	ACTIVE
		003	FLOOR SWEEPINGS	055	W159657		133	ACTIVE
		003	CAPACITORS	055	W158567		191	ACTIVE
		003	FLOOR SWEEPINGS	055	W158566		371	ACTIVE
		003	FLOOR SWEEPINGS	055	W158559		308	ACTIVE
		003	FLOOR SWEEPINGS	055	W154014		109	ACTIVE
		003	GLASS	055	W153928		17	ACTIVE
		003	FLOOR SWEEPINGS	055	W153922		308	ACTIVE
		003	FLOOR SWEEPINGS	055	W309299		153	ACTIVE
		003	FLOOR SWEEPINGS	055	W307694		456	ACTIVE
		003	FLOOR SWEEPINGS	055	W307962		279	ACTIVE
		003	GLASS	055	W307697		219	ACTIVE
		012	CONTAMINATED WATER O	055	W158143		134	ACTIVE
	TS6	003	NON-RECOVERABLE TRAS	055	W158561		61	ACTIVE
		003	NON-RECOVERABLE TRAS	055	W159659		45	ACTIVE
		003	NON-RECOVERABLE TRAS	055	W158145		30	ACTIVE
		003	NON-RECOVERABLE TRAS	055	W158558		84	ACTIVE
		003	NON-RECOVERABLE TRAS	055	W159665		28	ACTIVE
		003	NON-RECOVERABLE TRAS	055	W158562		55	ACTIVE
		003	NON-RECOVERABLE TRAS	055	W158146		57	ACTIVE
		003	NON-RECOVERABLE TRAS	055	W158147		42	ACTIVE
		003	NON-RECOVERABLE TRAS	055	W159423		50	ACTIVE
		003	NON-RECOVERABLE TRAS	055	W159666		27	ACTIVE
		015	CONTAMINATED OIL, IN	055	W158133		194	ACTIVE
		027	CONTAMINATED RAGS, P	055	W153920		88	ACTIVE
		027	CONTAMINATED RAGS, P	055	W158138		163	ACTIVE
		027	CONTAMINATED RAGS, P	055	W158129		255	ACTIVE
		093	BIRD CARCASSES, DROP	055	W158150		118	ACTIVE
		003	TYPE C-COMPACTIBLE W	616	W155000	49669	0	ACTIVE

Containers Stored at Location: 139

SWIFTS Report #1

SiteWide Waste Information, Forecasting, and Tracking System
Container Inventory Awaiting Off-Site Disposal, Treatment, or
Certification Meeting OSDF Requirements for Plant 1 D&D by Location

: #	Loc	Area	Mat	Description	Con	Inv_No	Serial_N	Net Weight	Status
	0007	S	003	TYPE H1-PROCESS PIPI	616	W151999	960031	16,360	ACTIVE
		SOUTH	004	CONTAMINATED STEEL A	200	W151836	500213	0	ACTIVE
:al Containers Stored at Location:			2						
	004B	SOUTH	004	CONTAMINATED STEEL A	200	W151546	500206	0	ACTIVE
:al Containers Stored at Location:			1						
	0056		049		340	W157845	421829	1,604	ACTIVE
			049		340	W156079	421742	3,128	ACTIVE
:al Containers Stored at Location:			2						
	010A	N. PAD	003	TYPE B-CONSTRUCTION	616	W151997	960027	0	ACTIVE
			003	NON-RECOVERABLE TRAS	616	W154990	960037	3,630	ACTIVE
			003	TYPE B-CONSTRUCTION	616	W153854	960035	0	ACTIVE
			003	TYPE H1-PROCESS PIPI	616	W153857	960032	12,830	ACTIVE
:al Containers Stored at Location:			4						

Total containers not included in SWIFTS reports number 2 or 3 148

Report 2 - OSDF Debris Containers in Interim Storage Awaiting Stockpiling or OSDF Disposition from Plant 1 D&D

This report varies from the first report in column 4. Report 2 uses the Categories from the OU3 RI/FS:

B - Inaccessible Metal
I and I1 - miscellaneous
E- Concrete

SWIFTS Report #2

SiteWide Waste Information, Forecasting, and Tracking System
OSDF Debris Containers in Interim Storage
Awaiting Stockpiling or OSDF Disposition from Plant 1 D&D

Proj	Loc	Area	Category	Inv_No	Serial_No	Con	Net Wt	Status
83	0001	I	E	W154257	421513	340	4,180	ACTIVE
				W136821	420312	340	6,979	ACTIVE
				W155084	421618	340	3,771	ACTIVE
				W136823	420329	340	4,979	ACTIVE
				W136840	420330	340	4,029	ACTIVE
				W153681	420985	340	3,460	ACTIVE
				W136799	420274	340	6,783	ACTIVE
				W136498	420033	340	7,818	ACTIVE
				W154256	421525	340	5,699	ACTIVE
				W156185	421787	340	5,508	ACTIVE
				W158957	481866	340	5,824	ACTIVE
				W156192	421810	340	6,200	ACTIVE
				W158958	481860	340	5,981	ACTIVE
				W156193	421811	340	6,659	ACTIVE
				W158942	481857	340	5,274	ACTIVE
				W153244	420931	340	5,643	ACTIVE
				W156141	421779	340	5,852	ACTIVE
				W157852	421808	340	5,807	ACTIVE
				W156190	421833	340	6,944	ACTIVE
				W155938	421673	340	5,341	ACTIVE
				W158985	481875	340	5,148	ACTIVE
				W153235	420932	340	5,111	ACTIVE
				W153243	420919	340	5,648	ACTIVE
				W154937	421600	340	4,970	ACTIVE
				W154255	421538	340	3,762	ACTIVE
				W136800	420280	340	5,503	ACTIVE
		IP	16	W153176	420879	340	0	ACTIVE
				W153173	420866	340	0	ACTIVE
				W156191	421815	340	0	ACTIVE
			B	W134970	50345	616	0	ACTIVE
				W151270	950012	616	0	ACTIVE
			E	W156196	421799	340	0	ACTIVE
				W157836	421798	340	0	ACTIVE
				W155190	421633	340	0	ACTIVE
			I1	W136553	50362	616	0	ACTIVE
			I2	W134968	50340	616	0	ACTIVE
				W136816	49675	616	0	ACTIVE
				W135234	12663	616	3,210	ACTIVE
				W151471	49706	616	0	ACTIVE
				W134980	50353	616	0	ACTIVE
				W151654	50344	616	8,790	ACTIVE
al Containers Stored at Location:			41					
	0007	W	B	W151998	960030	616	15,510	ACTIVE
				W153197	960028	616	20,130	ACTIVE
				W153198	960038	616	16,350	ACTIVE
			I1	W153199	960033	616	17,570	ACTIVE

SiteWide Waste Information, Forecasting, and Tracking System

OSDF Debris Containers in Interim Storage

Awaiting Stockpiling or OSDF Disposition from Plant 1 D&D

:ol	Loc	Area	Category	Inv_No	Serial_No	Con	Net Wt	Status
:al Containers Stored at Location: 4								
	0080	N. GRAVEL	I2	W151542	50351	616	8,210	ACTIVE
				W156962	50359	616	8,870	ACTIVE
:al Containers Stored at Location: 2								
	010A	N. PAD	B	W134914	49696	616	17,970	ACTIVE
				W153856	960040	616	16,570	ACTIVE
			I1	W155002	960036	616	8,910	ACTIVE
:al Containers Stored at Location: 3								
	02/3	PAD	B	W134865	49678	616	14,430	ACTIVE
				W135896	50357	616	27,670	ACTIVE
				W136555	50367	616	25,770	ACTIVE
				W136550	50342	616	23,850	ACTIVE
				W134979	50348	616	17,790	ACTIVE
				W151404	49674	616	20,170	ACTIVE
				W151468	49666	616	27,070	ACTIVE
				W136812	49682	616	28,750	ACTIVE
				W134867	49679	616	0	ACTIVE
			I1	W151403	49692	616	11,850	ACTIVE
				W135082	50369	616	13,050	ACTIVE
				W136548	950025	616	0	ACTIVE
			I2	W136811	49701	616	0	ACTIVE
		PAD SOUTH	B	W135937	50350	616	0	ACTIVE
				W136487	950024	616	19,290	ACTIVE
				W136678	50349	616	22,250	ACTIVE
			I2	W134934	49703	616	0	ACTIVE
		PAD WEST	B	W134975	50346	616	21,650	ACTIVE
				W135232	12661	616	13,630	ACTIVE
			I1	W135106	50372	616	11,750	ACTIVE
:tal Containers Stored at Location: 20								
	026B	EAST	I2	W135939	49714	616	8,730	ACTIVE
			B	W135449	950007	616	17,130	ACTIVE
			I2	W136677	50343	616	0	ACTIVE
				W136683	49713	616	0	ACTIVE
Total Containers Stored at Location: 4								

Total Containers Interim Stored from OSDF from Plant 1 D&D: 74

Report 3 - Debris Pile Transaction Information for the Plant 1 D&D Project

This report differs from the previous two reports since this report is on the stockpiled material.

Column 1 is the Pile location:
W800002 - is OU3 Debris Category B material located at Plant 1 Pad Phase E*
W800004 - is OU3 Debris Category A material located at Plant 1 Pad
W800005 - is OU3 Debris Category E material located at Plant 1 Pad
W800006 - is OU3 Debris Category A material located at Plant 1 Pad, Building 67 foundation
W800007 - is OU3 Debris Category G material located at Plant 7 East

*OU3 Debris Categories have been defined in Table 2-3 of the Plant 1 Complex - Phase I implementation plan.

Column 2 is the Inventory Number. This is the inventory number of the roll-off box that was emptied at the material stockpile. Roll-off containers may be emptied and re-used. The inventory number is not changed. SWIFTS automatically regenerated the roll-off box as empty when the contents were added to the stockpile.

Column 5 is the OU3 Debris category listing.

Column 6 is the net weight of the material added to the stockpile.

SWIFTS Report #3

SiteWide Waste Information, Forecasting, and Tracking System
Debris Pile Transaction Information for the Plant 1 D&D Project

ile Id	Cont. Inv #	Cont. Type	Project	Category	Weight (lbs) Added to Pile
800002	W136552	616	383	B	17,690
	W134925	616	383	B	19,530
	W134903	616	383	B	21,130
	W134974	616	383	B	31,650
	W154991	616	383	B	18,930
	W134884	616	383	B	17,912
	W153859	616	383	B	17,010
	W134915	616	383	B	17,270
	W153855	616	383	B	19,370
	W134899	616	383	B	17,750
	W134916	616	383	B	18,210
	W136549	616	383	B	17,890
	W136553	616	383	B	17,150
otal lbs from Plant 1 D&D:		19,346			
800004	W999888	999	383	A	868,000
otal lbs from Plant 1 D&D:		868,000			
800005	W999888	999	383	E	299,040
otal lbs from Plant 1 D&D:		299,040			
800006	W999888	999	383	A	58,000
otal lbs from Plant 1 D&D:		58,000			
800007	W999888	999	383	G	314,000
otal lbs from Plant 1 D&D:		314,000			

l Weight (lbs) Added to Pile from Plant 4 D&D to date: 1,790,532

Attachment E

LARGE SCALE TECHNOLOGY DEMONSTRATION PROJECT REPORT DURING THE PLANT 1 COMPLEX - PHASE 1 D&D

Fernald Plant 1 Large Scale Technology Demonstration Project

Several technology demonstrations were conducted as part of the Fernald Environmental Management Project's Plant 1 Large Scale Technology Demonstration (LSTD) Project sponsored by the Decontamination and Decommissioning (D&D) Focus Area at the Federal Energy Technology Center located in Morgantown, West Virginia. An LSTD Project has two primary objectives. First, fully developed but unproven technologies in the D&D field are identified that address defined problems/needs of a particular D&D project. The second objective is to quantify and document the derived benefits (i.e. cost, schedule, and/or safety), that can be achieved through the use of each of the demonstrated technologies when compared against a baseline technology. The side-by-side comparative technology demonstrations were intended to provide the D&D sector with new or enhanced technologies.

Following extensive screening and review, the most applicable technologies are approved for a full scale technology demonstration and integrated into a DOE D&D project. A brief description of each technology selected for demonstration, the target problem the technology was to address, and the subsequent results of each demonstration follows.

SPRAY VACUUM CLEANING TECHNOLOGY (The Kelley Decon System)

The Plant 1 D&D Implementation Plan requires that debris and segmented process components, suitable for disposal in the OSDF, be cleaned (with a high pressure water system) before it is placed in the OSDF. The application of the base-line technology is limited to debris and segmented components or equipment that had not contained or processed enriched materials (i.e., enriched is > 1.25 wt% U-235). The intent of this demostration was to use this technology to perform cleaning on components contaminated with enriched process residue.

This technology used a pressurized heated stream of water (+/- 1 gpm) that flashed to steam upon impacting on the surface being cleaned. Except when using the wand, the resulting steam was vacuum collected (along with any matter/contaminants removed from the surface). The collected steam was condensed and discharged to a sump. The remaining air stream was HEPA filtered and discharged. The corresponding baseline technology was a 2:2 gpm high-pressure water system. The cleaning water from the baseline system was collected in a sump along with entrained contaminants. For both technologies the water was routed from the sump to sampling tanks. Routing of the water from the sample tanks was based on the results of the sample analysis.

The Spray Vacuum System came with four cleaning heads or attachments; these were 1) wand, 2) brush with spray and vacuum collection, 3) long handled rectangular spray/vacuum head, and 4) a hand held version of attachment 3. The most versatile attachment was the wand. However, it required the same water collection provisions as the high-pressure water system. In addition, it was not considered to clean as well as the high-pressure water system which operated at a much higher pressure and flow rate. The other attachments had specific applications which required they be changed as the decontamination application changed (typically this took about a minute or less). The rectangular head worked best on flat or near flat surfaces. It could not get into corners and weld seams interfere with its use. Also longer usage of the hand held unit hurt the back. The brush was used were the rectangular head could not be used. The large combined steam and vacuum hose also got in the way on occasions.

The general consensus of the D&D laborers was that the Kelly System was an excellent technology but was being used in the wrong application. Advantages of this unit (as defined by the D&D laborers) was that in contrast to the high-pressure water system, wash water and contaminants were more effectively controlled. Another observed benefit was that the steam cleaned components were nearly dry at the end of the cleaning process. This improves the effective throughput by reducing the time that the cleaned material has to be staged before it is dry and can be moved out of the staging area.

SOFT MEDIA BLAST CLEANING TECHNOLOGY (AEA Technologies, Inc)

The Plant 1 D&D Implementation Plan requires that debris and segmented process components, suitable for disposal in the OSDF, be cleaned (high-pressure water system) before it is placed in the OSDF. The application of the water cleaning technology is limited to debris and segmented components or equipment that had not contained or processed enriched materials (i.e., enriched is > 1.25 wt% U-235). The intent of this demostration was to use this technology to perform cleaning on components contaminated with enriched process residue.

AEA Technologies' Soft Media Blast System (or Sponge Cleaning Technology) is, to an extent, a variation of a high-pressure water system where the kinetic energy of the blasted soft media provides the removal mechanism for the surface contaminants on the material being cleaned. Unlike the baseline system, the AEA System was used to clean segmented components/equipment that had been contaminated with enriched process residue.

Although the AEA Soft Media Blasting System can consist of the feed unit with integrated control panel, a media cleaning unit, and a shifter or classifier unit, this demonstration was conducted using only the feed unit with integrated control panel. This component is portable and produced in several sizes to accommodate the needs of a variety of end users. Not provided as part of the AEA System is an air compressor which provides the motive force for the blast media.

The soft media blasting process starts by loading the selected blast medium into the feed unit's hopper. The hopper sits above a pressure vessel which it feeds into. When the demonstration was conducted at the FEMP, the laborers filled not only the hopper but also the pressure vessel. Internal to the pressure vessel is an actuator which rotates 90 degrees back and forth ensuring that the blast medium does not bridge or clog, thus ensuring a smooth and continuous flow of media from the pressure vessel. The medium is fed into a metering chamber by an auger type device. The provides a means of controlling the feed of blast medium into the transport air stream. Also, the medium feed rate can be controlled to the desired rate by varying the auger speed. The air blast medium mixture is transported from the metering chamber via a 1¼-inch inside diameter (I.D.) hose fitted with a venturi style tungsten carbide blast nozzle. During this demonstration both a 3/8 -inch and ½-inch I.D. nozzle was used.

The blast media used with this technology is available in six grades, which are designated by the color of the individual medium. The six grades of blast media are as follows:

Green	= non-aggressive cleaning medium, *no abrasive*
White	= low-abrasion cleaning medium, impregnated with *plastic chips*
Brown	= low-aggressive cleaning medium, impregnated with *Starblast™*
Yellow	= medium-aggressive cleaning medium, impregnated with *garnet*
Silver	= very-aggressive cleaning medium, impregnated with *aluminum oxide*
Red	= high-aggressive cleaning medium, impregnated with *steel grit*

Due to the structure of the soft blast medium, this material absorbs and traps the contaminants and carries the contaminants away from the substrate for easy disposal. Both the green and brown blast media were used in the demonstration of this technology as part of the Plant 1 LSTD.

This technology was used to clean waste material comprised of segmented process components that had been contaminated with enriched process residue. Such components would not normally be cleaned using the baseline system and are typically being sent to the Nevada Test Site (NTS) for disposal. An objective of this demonstration was to show that this Soft Media Blast Cleaning Technology can, in fact, clean this waste type to the point that it could meet the FEMP's On-Site Disposal Facility (OSDF) Waste Acceptance Criteria (WAC). If this could be achieved, the FEMP would save the packaging and transportation costs, as well as the disposal fees associated with the disposal of this waste at NTS. This technology was shown to successfully clean components that had been contaminated with enriched process residue. All components cleaned with the sponge media was redirected to the stockpile for eventual disposal in the OSDF.

This technology demonstration was conducted using the green and brown media. The first time the brown sponge was used (the more abrasive of the two sponges), all the paint was stripped from the component segment being cleaned. This raised Industrial Hygiene concerns regarding airborne lead concentrations and use of the brown media was stopped until the last day of the demonstration at which time the brown sponge was again used. The objective was to see if it could be used without stripping the paint.

A major problem encountered with this technology was its associated noise level. Using FEMP procedures for calculating the "stay time" or allowable work duration for noise at the evevated levels generated by this technology, laborers were limited to one hour per day. Two hours of cleaning per day was achieved by rotating laborers.

One observed modification to the Sponge Cleaning System was an improvised wand. The "nozzle" for this system was relatively short and was attached directly to hose. The jury-rigged modification was to tape 1" X ½" X 4' board to the nozzle and hose creating, in effect, a 4' wand. (A handle was also attached.)

Specifics related to equipment performance, the demonstration data, and the life-cycle cost analysis for this technology are provided in the Detailed Technology Report prepared for this technology.

LOW-DENSITY CELLULAR CONCRETE (LDCC) VOID FILLING TECHNOLOGY (Pacific International Grout)

A significant portion of the D&D debris and process equipment removed from the various process facilities at the FEMP will ultimately be disposed of in the OSDF. Thus, compliance with the OSDF's WAC is essential. The OSDF precludes the placement of waste materials into the OSDF with voids of greater than one cubic foot. The intent of this technology is to fill any potential voids in components allowing for disposal in the OSDF without segmentation (i.e., size reduction).

This technology demonstration was conducted in Building 30B, which was located close to and southeast of Building 1A. The demonstration started with two 10 cubic yard concrete trucks arriving at the site. Each of the concrete trucks contained a three cubic yard mixture of a cement and water (there was no added aggregate). A preform foam (i.e., the foam is generated external to the concrete) was added to the concrete, which significantly reduced its density. The foam used, was generated by aerating a protein based surfactant.

Foam addition to the concrete was performed outside the radiologically controlled area. The preparation of the first concrete truck took about 45 minutes while the second truck took about 15 minutes. In this process, the concrete is brought forward in the truck's large mixing drum. The foam is then shot over the cement and the cement is then moved back and forth to mix it with the foam. This process is repeated until the correct density is achieved. The density is checked by weighing a specific volume of the LDCC.

Pacific International Grout is able to produce LDCC with densities under 25 pounds per cubic foot. However, this requires the use of their mixing header and transfer pump. Due to the limited scope of this effort and material handling equipment required to move the LDCC System components, it was decided to generate the LDCC as described above and use a Putzmeister Pump to transfer the LDCC to the components being filled. The use of a Putzmeister Pump required the LDCC to have a density of about 45 pounds per cubic foot versus 25 pounds per cubic foot. This change in density is not believed to have significantly influenced the technology demonstration.

Once the cement and foam were properly mixed, the cement trucks drove to the demonstration location. The transfer pump was readied and the transfer line run to the interior of the building. Filling of three tanks with LDCC took less than two hours involving five people it is doubtful five would be needed under a routine application. Demobilization simply involved cleaning the outside of the transfer hose. The trucks were off the site soon after (about an hour) the completion of the demonstration.

Should this technology replace equipment segmenting, it is expected that components requiring void filling would be moved to a central staging area where a large scale void filling effort would be conducted. An option which has not been evaluated is conducting void filling in the OSDF. This option would simplify material handling concerns and eliminate "clean up" efforts.

Surprisingly one of the observations was the apparent ease with which the flow rate of the LDCC could be controlled. At the end, filling of the last vessel required the use of a funnel to top off a high point void. This was not a large funnel and there was no problem in turning down the flow rate in order to avoid spills of LDCC. It must, however, be pointed out that spills did occur and in fact were the result of leaks from small openings. These were all quickly sealed while the components were still being filled.

Specifics related to equipment performance, the demonstration data, and the life-cycle cost analysis for this technology are provided in the Detailed Technology Report prepared for this technology.

LDCC VOID FILLING	SEGMENTATION
• Void filling three tanks* with a total volume of 238 cubic feet - 30 man-hours** (6 hours X 5 individuals)	• Segmenting four tanks with a total volume of approximately 690 cubic feet - 328 man-hours
• Add cost to remove components from building and transfer to the demonstration location	• Add cost of acetylene and oxygen
• Add cost for void filler	• Add cost of lead paint stripper
• Added costs incurred when placing the full components in the OSDF.	

* One of these tanks was stainless steel and would have been much more difficult to flame cut.

** This is a conservative estimate. The actual time spent will be determined from the data package. Also, when a large quantity of tanks were being filled at one time, this production rate would be improved through the use of the technology providers mixing header which would, at a minimum, preclude the need to first prepare the cement/foam mixture as described above.

FOAM VOID FILLING TECHNOLOGY (Urethane Foam Specialist)

A significant portion of the D&D debris and process equipment removed from the various process facilities at the FEMP will ultimately be disposed of in the OSDF. Thus, compliance with the OSDF's WAC is essential. The OSDF precludes the placement of waste materials into the OSDF with voids of greater than one cubic foot. The intent of this technology is to fill any potential voids in components allowing for disposal in the OSDF without segmentation.

The polyurethane foam used in this demonstration was produced by combining (in predetermined proportions based on the foam's intended used): FE 800A; Polymeric diphenylmethane diisocyanate (MDI), the catalyst; and FE 632B - Polyol Blend, Tertiary Amine with Silicone Surfactant, the foaming agent. The foam when injected is in the form of a liquid. Shortly after being injected, the liquid starts to expand into a "foam". The speed at which the

liquid/foam expands can be controlled by the temperature of the liquid which is set through a control unit. The foam in its liquid phase is injected in stages. This allows the liquid/foam to expand to its maximum extent before additional liquid is added.

The physical properties (i.e., density and compressive strength) of the foam can be varied over a wide range by changing the ratio of its two components as well as its starting temperature. For this demonstration the foam's most important property was its compressive strength. It was specified that the foam have a compressive strength of 15 psi in order to ensure that at no time the minimal compressive strength does not drop below 10 psi which is the minimum compressive strength required by the OSDF's WAC criteria. Compressive strengths of up to 50 psi can be achieved with polyurethane foams.

This technology demonstration was conducted in Building 30B which was located close to and southeast of Building 1A. The demonstration started when Urethane Foam Specialist parked its truck adjacent to the Building 30B. The truck contained a drum of both the catalyst and surfactant as well as the process control unit which controlled both the mixing ratio of the two foam components and their temperature. Next a hose (which was wrapped to prevent its contamination) was run into Building 30B. Attached to the end of the hose was the mixing gun. The two foam generating components are kept separate until they are near the exit of the mixing gun at which point they are mixed.

During the demonstration the air in Building 30B was continuously monitored for MDI. The first action level was set at 5 ppm at which point the observers in Building 30B would have to don respirators. At 20 ppm everyone would have to leave Building 30B until ventilation of Building 30B lowered the concentration of MDI to acceptable levels. With only one exception, the MDI monitor reading was zero. For an instant the monitor did register a reading of 2 ppm. Since the monitor did drop back to zero and remain there, it was not know if it was a true reading or a spurious reading.

The components being filled with foam had all openings sealed. In addition, the openings through which the foaming agent was injected had covers which were used to ensure the components were totally full. Foam filling of the components was performed in a manner that resulted in the formation of a depression in the area of each opening. This depression was then partially filled with the liquid foam and the cover then closed and tightened down. As the liquid expanded, it forced foam into any opening no matter how small. Eventually the force on the closed cover from the expanding liquid foam was so great that foam was forced out between the cover-component seating area. This method of foaming provided added confidence that the void volume was filled to the greatest extent possible.

This demonstration involved void filling of two components each having an internal volume of about 60 cubic feet. Filling of the two components with foam took about an hour involving four laborers (it is doubtful four would be needed under a routine application). Demobilization simply involved cleaning the outside of the transfer hose (removing the protective wrap) and surveying the truck before exiting the site. The total demonstration took no more than two and one-half hours for mobilization, void filling, and demobilization.

Should this technology replace equipment segmenting, it is expected that components requiring void filling, would be moved to a central staging area where a large scale void filling effort would be conducted. An option which has not been evaluated, is that the void filling be

conducted in the OSDF. This option would simplify material handling concerns and eliminate "clean up" efforts.

Specifics related to equipment performance, the demonstration data, and the life-cycle cost analysis for this technology are provided in the Detailed Technology Report prepared for this technology.

FOAM VOID FILLING

- Void filling two tanks with a total volume of 120 cubic feet - 10 man-hours* (2.5 hours X 4 individuals)
- Add cost to remove components from building and transfer to the demonstration location
- Add cost for void filler
- Added costs incurred when placing the full components in the OSDF.
- This is a conservative estimate. The actual time spent will be determined from the data package. Also, under a situation where a large quantity of tanks were being filled at one time, this production rate should be improved as a result of the mobilization/demobilization time representing a much smaller portion of the total time required.

SEGMENTATION

- Segmenting four tanks with a total volume of approximately 690 cubic feet - 328 man-hours
- Add cost of acetylene and oxygen
- Add cost of lead paint stripper

FIELD RAMAN SPECTROSCOPY DEMONSTRATION (EIC Laboratories)

Many of the buildings at the FEMP have areas contaminated with uranium or thorium or a mixture of these two radionuclides. In order to provide the proper radiological postings, personnel monitoring requirements, and access requirements, the contamination levels for these radiological contaminants must be quantified.

Currently quantification of the individual radioactive contaminants is performed by taking swipes in the area in question and then sending these swipes to a fixed laboratory for analytical analysis. Typical turn-around for these analyses range from two to three weeks. The down posting of a thorium area (after work and cleanup/decontamination is complete) is prevented until results are received and evaluated. Access may be prevented if activities will impact the results of the survey being performed. Additionally, these analyses are costly. Typical cost for the analysis of swipes for total and isotopic uranium average $269.00 per swipe. This requirement to characterize/quantify the radiological contaminants occurs each time an activity is performed which could change the isotope of concern affecting the down posting of a particular work area. Such activities include cutting (increased airborne levels and redeposition of airborne contaminants), cleaning (or any decontamination activity), lockdown, etc.

The objective of this technology demonstration was to determine if the off-site or fixed laboratory analyses could be replaced by a field portable Raman Spectroscopy Unit which could provide a rapid qualitative and quantitative tool for the analysis of swipes.

When a sample is illuminated with laser light, three major things happen to the light; 1) it is transmitted through the sample, 2) it is reflected, and 3) it is scattered. However, a small fraction (about one millionth) of the light is inelastically scattered from the sample. The varying wavelengths of the inelastically scattered light are characteristic for each compound. The intensity of the scattered light provides a means for quantification.

Despite some very positive aspects of the technology, Field Raman Spectroscopy did not prove to be a viable technique for the analysis of radiological swipes. The Field Raman Spectroscopy system was unable to provide any characterization or qualitative data relative to the collected swipes. Several factors contributed to the poor results observed during analyses. These factors include the poor scattering efficiency of uranium oxide (U_3O_8), the "dirty" nature of the swipes collected, the small area on the swipe used for analysis, and "loading" of analytes.

LASER INDUCED FLUORESCENCE (Special Technologies Laboratory)

In order to allow buildings to be opened to the environment, radiological surveys of floors, walls, and ceilings must take place. These surveys must demonstrate removable contamination levels of <5000 disintegrations per minute (dpm) alpha and <5000 dpm beta/gamma. After successful completion of the radiological clearance survey, demolition of the building can continue.

Currently, this process is performed one of two ways. First, if a high pressure water system is used as the final cleaning technique prior to opening the building, a grid survey approach is used. The survey collection grid would divide Building 1 into a number of 2 feet x 2 feet grids. Within each grid a defined number of samples would be taken. Four smear samples would be taken from horizontal surfaces, two smear samples would be taken from vertical surfaces, and two smears would be taken from overhead surfaces. Each of these smears would then be counted in a Tennelec overnight to determine the results.

The second method of clearance surveying would involve the random collection of swipes. This methodology would be employed when an alternate final cleaning method, such as vacuuming, is used. Swipes would be collected at the discretion of the Radiological Control Technician and Radiological Engineer. These samples would generally be taken from the more difficult areas to clean. As with the other methodology, each of these smears would then be counted in a Tennelec overnight to determine the results.

The objective of the technology demonstration described in this report was to determine if the collection of smear samples could be replaced using Laser Induced Fluorescence (LIF). By using LIF, it was hoped that the amount of time required to perform the radiological clearance survey could be significantly reduced leading to an overall shortening of the D&D schedule. Additionally, the LIF could also improve safety by eliminating the need to climb scaffolding to obtain swipes from vertical or overhead surfaces.

LIF works by using laser light to cause an excitation of the uranium oxide molecules that are present as surface contaminants. Energy is then released from the molecules in the form of fluorescence which is then detected and displayed on a monitor attached to the laser. The laser can be moved in a panning effect to survey large areas quickly, or it can be used to survey discreet 2' x 2' areas at a time. The LIF offers an additional feature. Unlike smears which must physically be taken from the surface being surveyed, the LIF survey can be performed up to 10 meters away from the surface being studied. All detection is performed virtually instantaneously.

LIF rapidly identified uranium on surfaces. While the relative intensity of the fluorescence provides some measure of the amounts present, the correlation between the intensity of the fluorescence and actual contamination levels present remain subject to validation. Some problems with the equipment were experienced in terms of durability and handling in the field (bulky). This input was provided to the vendor for improved design packaging.

PIPE INSPECTION (Visual Inspection Technologies, Radiological Services Inc.)

In several of the buildings at the FEMP, there is piping that has been used to transport process materials. As the demolition of these building occur, disposal of this piping has become a costly issue. Currently, all process piping is cut into 10 ft. sections, the ends of the pipe are capped to prevent the spread of contaminants into the air, and the capped piping is placed into a roll-off box for eventual packaging and shipment to NTS for disposal. Alternatives that allow for the on-site disposal of process piping are greatly desired due to the potential for dramatic savings in current off-site disposal costs.

Current regulatory commitments require that a visual inspection be performed prior to the introduction of process piping into the OSDF. According to the Plant 1 Area D&D Performance Specification 01517 1.8.A.1, "To remove equipment, material or debris from a local containment or enclosure, or to containerize, surfaces shall be free of visible process material as determined by an FDF representative. The definition of visible process material is: Visible process residues (green salt, yellow cake, etc.) on the interior or exterior surfaces of materials that is obvious to the eye and if rubbed, would be easily removed. Stains, rust, corrosion, and flaking do NOT qualify as visible process material. If an item fails visual inspection the item shall be deemed a Category C item and encapsulated or wrapped in accordance with Section 0517 3.2.C. of this specification package. All equipment, material, and debris are still considered to be radiologically contaminated." No means is currently employed to allow for the complete inspection of the interior of piping and consequently, process piping has been assumed to be internally contaminated and thus routinely disposed of at NTS.

Two technologies were evaluated. The first, supplied by Visual Inspection Technologies, involved remote inspection of the process pipe using a charged coupled device/chip camera probe equipped with light heads attached to a cable. The device was operated by a camera control unit and a VCR/monitor combination. The second technology, supplied by Radiological Services Inc., involved remote camera inspection similar to the other technology but with the addition of a pipe crawler/radiation detector unit.

During the demonstration of the Visual Inspection Technologies system, 48 pipes were inspected. All of them were about six feet long, ranging in diameter from 2.5 to 27 inches. Thirty-two of the 48 pipes were found to be free of process residue using the first technology. Using the second technology 33 pipes were inspected and 15 were found to be free of process residue. All piping found to be free of process residues has been set aside for disposal in the OSDF.

OXY-GASOLINE TORCH DEMONSTRATION (Petrogen)

During the D&D process, significant amounts of piping, structural steel, tanks, and shield walls must be cut to facilitate their removal from buildings. This demonstration focused on techniques to enhance or improve cutting methodologies used at the FEMP.

The oxy-gasoline torch system consists of a 3 gallon fuel tank (ASME coded) that is equipped with an automatic flow cut-off valve and pressure release valve, 2-braid gasoline supply hose and a cutting torch. The design of the cutting torch delivers the gasoline to the tip of the torch as a confined liquid, thereby preventing any flashback through the line. The expansion of the gasoline from a liquid to vapor, along with mixing with oxygen, occurs at the torch tip.

The oxy-gasoline torch was used side-by-side with the acetylene torch. Both were used on the same equipment, vessels, and shield walls. A total of 300 inches of materials were cut by both torches during the demonstration. Steel thickness ranged from 0.5 to 4.5 inches.

On thicker metals, the oxy-gasoline torch cut significantly faster. The oxy-gasoline torch took 13 minutes to cut a 2 inch thick steel plate. Standard acetylene torch cutting methods required 27 minutes to perform the same cut. In addition, the oxy-gasoline torch makes a "cleaner cut." When cutting thick metal with an acetylene torch, the molten metal has a tendency to flow back together, refuse, and reconnect the segmented metal pieces. This phenomenon was not observed with the oxy-gasoline torch.

The oxy-gasoline torch substantially out performed standard acetylene cutting methods when cutting tanks or other components with significant quantities of rust on the interior surfaces. When highly rusted surfaces are encountered by an acetylene torch, cutting is very difficult. However, rust did not seem to inhibit the performance of the oxy-gasoline torch.

The economics of this technology also appear to be superior. The oxy-gasoline torch system costs about $500 more than an acetylene torch system. However, there are significant fuel savings over the lifetime of the oxy-gasoline equipment. During the demonstration, as the oxy-gasoline torch was used to cut thick metal, only 2.5 gallons of gasoline (about $3) was required. To perform the same operation using acetylene cutting, one bottle of acetylene (about $32) would be required.

VECLOADER HEPA VAC TECHNOLOGY DEMONSTRATION (Vector Technologies Ltd.)

Many of the FEMP structures have a layer of mineral wool insulation that must be removed from between the exterior and interior transite panels during D&D. Currently, this operation is performed manually. Aside from being very labor intensive to perform this operation creates a significant amount of airborne materials. The intent of this technology demonstration was to use the VecLoader system to remove the mineral wool more effeciently and to effectively reduce airborne emissions.

The VecLoader HEPA VAC is a self-contained, trailer-mounted vacuum unit that is typically used commercially to remove asbestos insulation. The HEPA VAC then transports asbestos insulation through a flexible, smooth bore suction hose which can have lengths up to 1000 ft. The insulation is captured in a fully-enclosed, negative pressure system and sent into a cyclone separator, then bagged.

During the demonstration, the VecLoader was used to remove the mineral wool insulation. After a short learning curve, laborers were able to effectively remove the insulation and bag it. A significant reduction in the amount of labor needed was observed as well as a significant reduction in airborne contamination levels.